

VTT Technical Research Centre of Finland

## Establishment and implementation of Urban Living Labs in Alby and Peltosaari

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## Deliverable D 3.3

### Establishment and implementation of Urban Living Labs in Alby and Peltosaari

Dissemination level		
PU	Public, to be freely disseminated, e.g. via the project website	X
IN	Internal, to be used by the project group	

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# 1 EXECUTIVE SUMMARY

Across Europe, some 200 million people live in suburban areas in great need of modernisation and social uplifting. The SubUrbanLab project (2013-2016) aims to examine how these areas can be modernised and socially uplifted together with the residents and other stakeholders in order to turn them into more attractive, sustainable and economically viable urban areas. To do this, the project has developed and set up so called Urban Living Labs (ULL), i.e. arenas for innovation and dialogue that focus on solving challenges in the urban area by involving residents and other stakeholders, in connection to needed modernization actions in two suburbs, one in Sweden (Alby in Botkyrka municipality) and one in Finland (Peltosaari in the City of Riihimäki).

In Alby, three ULL have been established and implemented in connection to needed modernization actions. The first ULL “Shape your world” focused on involving youth in urban gardening in order to increase their knowledge about gardening and sustainability while renewing the urban environment. The second ULL “New light on Alby Hill” examined how to use new LED-technology and involve residents in order to turn a passage way for pedestrians in Alby, currently perceived as unsafe, into a more attractive and frequently used passage way. In the last ULL “Vacant Space Alby” ideas for temporary activities for a 9000 m<sup>2</sup> vacant space in Alby Centre have been developed together with residents and other stakeholders.

Three ULLs have also been established and implemented in Peltosaari. The first ULL “Energetic co-operation” focused on improving energy-efficiency of the rental buildings together with the housing company and the residents through technological solutions and increasing awareness. The second ULL “Sustainable decisions” involved municipal decision-makers and officials in developing preparation for decisions and communication related to energy efficiency and sustainability of building and renovation investments, in order to better take into account the agreements and sustainability goals of the city in decision making. In the third ULL “Together more” the focus has been on creating and supporting establishment of free or low-cost leisure activities in the area together with the residents and the established associations in the area, to increase communal feeling and attractiveness of the area.

This report presents establishment and implementation process of the six Urban Living Labs carried out in Alby and Peltosaari, and is a continuation of the report *D 3.1 & D 3.2 Selection of Urban Living Labs in Alby and Peltosaari*.

The report is targeted for stakeholders interested in establishing Urban Living Labs, such as municipalities, housing companies and researchers that aim at involving different stakeholders in different kinds of development projects in the urban context. The report should also be interesting for researchers developing and utilising Urban Living Lab methodologies.

## 2 INTRODUCTION

### 2.1 About SubUrbanLab

Across Europe, some 200 million people live in suburban areas in great need of modernisation and social uplifting. The SubUrbanLab project (2013-2016) aims to examine how these areas can be modernised and socially uplifted together with the residents and other stakeholders in order to turn into more attractive, sustainable and economically viable urban areas.

The project has developed and set up so called Urban Living Labs, i.e. arenas for innovation and dialogue that focuses on solving challenges in the urban area by involving residents and other stakeholders, in connection to needed modernization actions in one suburb in Sweden (Alby in Botkyrka municipality) and one suburb in Finland (Peltosaari in the City of Riihimäki). In total six Urban Living have been set up, three in each suburb. Within the Urban Living Labs, residents and other stakeholders have been involved, using e.g. online tools, social media and face-to-face meetings, in developing and implementing innovative solutions to increase the social, economic and environmental sustainability in these areas in great need of modernisation and social uplifting. This report presents establishment and implementation process of the six Urban Living Labs carried out in Alby and Peltosaari, and is a continuation of the report *D 3.1 & D 3.2 Selection of Urban Living Labs in Alby and Peltosaari*.

The project team will also, in later reports, evaluate the implemented Urban Living Labs and the co-creation methods used in these Urban Living Labs and assess the potential for their up-scaling across Europe.

Project partners are: IVL Swedish Environmental Research Institute (IVL), Botkyrka municipality, VTT Technical Research Centre of Finland (VTT) and City of Riihimäki.

The project is funded by VINNOVA and Tekes through Joint Programming Initiative – Urban Europe.

### 2.2 Purpose and target group

The purpose of this report is to describe the establishment and implementation process of the Urban Living Labs (ULL) in Alby and Peltosaari.

The presented results are primarily of interest for other stakeholders interested in establishing Urban Living Labs, researchers on Urban Living Lab methodologies and the project partners in the SubUrbanLab project.

### 2.3 Contributions of partners

This report has been produced by Anja Karlsson (IVL), Maija Federley and Riikka Holopainen (VTT) and Ilari Seitsonen (City of Riihimäki). All project partners have provided valuable input to the report.

## 2.4 Relations to other activities in the project

This reports draws on the results from the definition of boundary conditions for a successful Urban Living Lab work and the definition of ULL methods and approaches [Friedrich et al, 2013], and continues the work presented in report D 3.1 & 3.2 Selection of Urban Living Labs in Alby and Peltosaari [SubUrbanLab, 2015].

The results from this report will feed into following project reports:

- D. 4.1 & 4.2 Evaluation of the Urban Living Labs in Alby and Peltosaari.
- D. 4.3 Potential for up-scaling of developed Urban Living Labs in other cities.
- D. 2.2 Assessment of the suitability of different Urban Living Labs methods for modernisation and social upgrading actions.

The above reports will be available on the project website by March 30, 2016.

## 2.5 Methodology

The establishment and implementation process of the Urban Living Labs in Alby and Peltosaari takes it departure from the boundary conditions for a successful Urban Living Labs and description of methods that can be used in different stages of the establishment and implementation process. These were presented in the report D 2.1 Boundary conditions for successful Urban Living Labs [Friedrich et al, 2013].

The report and the descriptions of the establishment and implementation process for each ULL is a continuation of the descriptions of the selection processes in report D 3.1& 3.2 Selection of Urban Living Labs in Alby and Peltosaari [SubUrbanLab, 2015].

The establishment and implementation processes for the different ULLs are described more in detail in section 4 (Alby) and 5 (Peltosaari). The establishment and implementation process has been thoroughly documented, e.g. in meeting minutes, throughout the ULL-process, focusing on describing the co-creation, co-creators and decisions made. This documentation has been used to describe the establishment and implementation process in this report.

### 3 URBAN LIVING LABS (ULL)

Urban Living Lab (ULL) is a forum for innovation, applied to the development of new products, systems, services, and processes in an urban area. An Urban Living Lab employs working methods to integrate people into the entire development process as users and co-creators to explore, examine, experiment, test and evaluate new ideas, scenarios, processes, systems, concepts and creative solutions in complex and everyday contexts. [JPI Urban Europe 2015]. The research and development are intertwined in a “living laboratory” – in the middle of people’s everyday living environment.

Living Lab methods have previously been used especially when developing ICT services [see e.g. Ståhlbröst & Holst 2013]. In Europe, there are many regional Living Labs where the residents participate in the development of new technologies or services together with different stakeholders, such as companies, universities and municipalities.

Accordingly, Urban Living Lab is a regional forum for innovation and dialogue that focuses on solving challenges in the urban area. ULL includes the following features [Ståhlbröst & Holst 2013]:

- it integrates researchers, public organizations, residents and companies to co-develop new solutions
- the users of the developed services or solutions are active partners in the development work during the whole process
- the solutions will be developed and evaluated in the real use context
- besides producing the concrete solutions, the aim is to learn and exchange knowledge among the partners
- the activities are encouraging and rewarding for all participants

In practice, Urban Living Labs can make use of different co-design methods both face-to-face and online to involve all relevant stakeholders in the process of planning, designing, developing and evaluating new solutions<sup>1</sup>.

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<sup>1</sup> The participatory methods that have been used in the Urban Living Labs are presented in the SubUrbanLab Report D2.2. Assessment of the suitability of different Urban Living Labs methods for modernisation and social upgrading actions



## 4 URBAN LIVING LABS IN ALBY – ESTABLISHMENT AND IMPLEMENTATION

In this chapter, the establishment and implementation process of the three Urban Living Labs (ULL) carried out in Alby are presented. First, a short summary of the focus of the ULL is presented, after which the process of the establishment and implementation for each ULL is put forward. The themes of the ULLs in Alby are:

- Urban gardening (ULL1)
- Energy efficient street lightning (ULL2)
- Temporary uses of a vacant space (ULL3)

The description of each ULL is based on meeting minutes and other documentation (such as e-mails) from the ULL process.

### 4.1 ULL 1: Shape Your World

#### Summary of the Urban Living Lab

Alby ULL 1 “Shape Your World”, which was implemented November 2013 – October 2014, provided children and young adults (age 12-16) with the opportunity to increase their knowledge and understanding of sustainable development and urban gardening while participating in renewing their urban environment. The ULL took place at Alby Youth Club where the children and young adults together renewed and uplifted the youth club using urban gardening.

The goals with the ULL were to provide children and young adults the opportunity to increase their interest, knowledge and skills about gardening, the environment and sustainable development; to provide children and young adults an increased interest, knowledge and skills about how to engage, participate and have an impact on local society; to offer children and young adults meaningful leisure activities related to sustainable development; and to renew the urban environment through gardening, thereby increasing the suburb’s attractiveness and the environment.

The ULL “Shape you world” was implemented by the SubUrbanLab project partners in Sweden, IVL and Botkyrka, in cooperation with Boodla ([www.boodla.se](http://www.boodla.se)), a social entrepreneur that together with children and young adults creates gardens in urban environments.

For more information on the selection process of the ULL “Shape Your World”, see *D 3.1 & 3.2 Selection of Urban Living Labs in Alby and Peltosaari* [SubUrbanLab, 2015] (available at [www.suburbanlab.eu](http://www.suburbanlab.eu)).

#### Establishment and implementation of the ULL

The detailed planning of activities within ULL “Shape Your World” started in November 2013 (Meeting minutes 2013-11-05), after a final project plan (developed idea) was accepted by all partners and relevant stakeholders. As a first step, municipality representatives and other important stakeholders (youth clubs, schools, culture clubs, sport clubs etc.) were

contacted in order to get input on the implementation of the ULL and also to get help to promote the urban gardening and ULL towards children and youth in Alby and around.

The biggest challenges identified at this stage were how to gain trust among youth and youth organisations and find the core of interested children and youth, that could also inspire others to join (Meeting minutes 2013-11-05; 2013-12-02). These challenges were confirmed by consulted stakeholders, such as youth clubs and representatives from other youth initiatives, who underlined that engaging youth in a new type of activity (such as urban gardening) was a time-consuming task. The experience of other stakeholders was also that older youth is a difficult target group to reach and that youth in Alby, in general, are “project-tired” as many projects are carried out in Alby targeting youth. However, all consulted stakeholders were positive towards the idea of engaging children and youth in urban gardening activities.

The consulted stakeholders also invited “Shape Your World” to take part in different already planned activities, such as the “This is Alby”-festival, and to use their established channels to reach youth (Meeting minutes 2014-01-07; 2014-01-09, 2014-01-21; 2014-01-28; 2014-01-30; 2014-01-30). Using the established channels to reach youth, it was decided to arrange a first information meeting about the ULL at Gula Villan (community house and garden in Alby) on the 10<sup>th</sup> of February to attract and engage youth to participate in urban gardening. However, due to low interest, the information meeting got cancelled. The ULL-team identified that one reason for this was that although the ULL had been presented to many youth organization leaders, not many youth had been directly approached. Also, the cold winter weather did not inspire to think about gardening. As a solution, the youth clubs in Alby and adjacent areas were contacted for setting up a meeting in order to organize visits to the youth clubs to reach the youth directly (E-mail 2014-03-03). During the meeting with the youth club leaders from all around Botkyrka, it was underlined that the best way to reach and engage the children and youth was to place the activities where the youth are, e.g. at the youth clubs, rather than persuading youth to participate in (new) activities outside their “comfort zone”. The youth club leaders were very positive towards organizing urban gardening activities at the youth clubs. As a result of the input and encouragement from the youth club leaders, a decision was made to bring the urban gardening activities of the ULL to the youths directly at the youth clubs. The youth club was hence identified, together with stakeholders, as a suitable place in Alby which could be renewed and uplifted using urban gardening (Meeting minutes 2014-03-21).

In the beginning of April 2014, two urban gardening workshops were held with youth, one in Alby Youth Club and one in Fittja Youth Club. Approximately 15 youth (ages 12-15) participated in Alby while 20 youth (ages 11-15) joined the activities in Fittja (the neighbouring district). Focus was on planting seeds together. In Alby, a suggestion was put forward to create a garden in the courtyard of Alby Youth Club with focus on growing eatable plants for a later potential BBQ. After the two workshops, based on the feedback from the Youth Clubs, the ULL-team decided to focus on urban gardening activities in Alby Youth Club with an aim to arrange an activity once a week (every Tuesday) targeting the youth using the Youth Club, with support from the youth club leaders. A poster with the needed information was developed and put up in the Youth Club and around Alby to attract more youth to participate (Meeting Minutes 2014-04-08; 2014-04-16).

The first Tuesday-workshop was held on the 29th of April, where six youth in the Youth Club participated in planting more seeds, re-planting the plants that had been planted during the first workshop into larger pots and discussing what could be planted and grown in the courtyard (Meeting minutes 2014-04-29). Another four urban gardening workshops were held on Tuesdays with children and youth until end of June 2014. Between three to ten children and youth (ages 11-15) as well as Youth Club leaders (ages 18 – 23) participated during these workshops, and focus was on discussing urban gardening and planting/re-planting eatable plants e.g. in the courtyard. As an experiment, a window-farm (using PET-bottles) was also put up in the Youth Club and planted with strawberries, tomatoes, herbs and salads, based on discussions between youth in earlier workshops. The window-farm was much appreciated by the participating youth and youth club leaders and attracted a lot of positive attention with discussions following on how a window-farm works. On the last workshop (17<sup>th</sup> of June) before the summer break, the youth focused on designing the Youth Club courtyard with help of a plan of the courtyard to draw on and inspirational magazines and books. Eatable plants, such as berries, were the most popular but also more benches and a basketball court (Meeting minutes 2014-05-06; 2014-05-13; 2014-05-27; 2014-06-03; 2014-06-17). Between 28th of June and 4th of August, the Youth Club was closed for the summer, and the pots and plants spent the summer in Boodlas garden in Alby.



*Window-farm and courtyard planting*

In August, 2014, the experiences and learnings of the urban gardening activities were discussed among the Swedish and Finnish project partners, including the coordinators of LiiKuTa and Boodla (Meeting minutes 2014-08-19).

The urban gardening activities were then resumed in the beginning of September as the schools started. The first workshop after the summer on the 2<sup>nd</sup> of September 2014 focused on planting blueberry and raspberry plants as wished by the youth during the courtyard design activity before the summer. Three youth and one youth club leader participated in the planting of the courtyard (Meeting minutes 2014-09-02). Until the middle of October, another six urban gardening workshops were held on Tuesdays at Alby Youth Club with focus on continuing planting in the courtyard according to the earlier made plans, to take care of the

window-farm and plant bulbs in the courtyard for the spring. Between one and five youth participated during these workshops, many of which had participated in earlier workshops (Meeting minutes 2014-09-09; 2014-09-16; 2014-09-23; 2014-09-30; 2014-10-07; 2014-10-14).

The final event, to conclude the urban gardening activities at Alby Youth Club, was discussed with the Alby Youth Club leaders during a meeting where Boodla presented their vision with urban gardening to the youth club leaders. It had become evident during the previous workshops that the involvement and interest amongst the youth club leaders was a key to engaging the youth in the urban gardening activities. The youth club leaders agreed that to have one or two leaders more involved in urban gardening activities would be vital for up-scaling the urban gardening efforts in the future, and expressed an interest to be more involved ahead. As a final urban gardening event, the youth leaders suggested a pumpkin-carving activity, as Halloween was coming up (Meeting minutes 2014-10-01). This was instead of the earlier idea to have a BBQ. The pumpkin-carving idea was later cheered on by the youth. On Saturday 18<sup>th</sup> of October, the pumpkin-carving event took place at Alby Youth Club after advertisement through posters and by the youth club leaders. The ULL-team also invited “Matlabbet”, an organization aiming to increase the interest on health and environment among children and youth through cooking, to make food of the leftover pumpkin meat. Around 20 children and youth, of which ten had participated in earlier workshops, took part in the pumpkin carving and food-making, together with several of the youth club leaders. Twelve pumpkin lanterns were made during the evening, lighting up the courtyard, and the evening was concluded by eating pumpkin soup, pumpkin bread and pumpkin pie. The evening was much appreciated by the youth, and also marked the final activity of the ULL “Shape Your World” (Meeting minutes 2014-10-18). In total, between April and October, 14 urban gardening workshops were held at Alby Youth Club.



*Final urban gardening workshop with pumpkin-carving*

For the evaluation and lessons learned from the Alby ULL “Shape Your World”, see D. 4.1. & 4.2 *Evaluation of the Urban Living Labs in Alby and Peltosaari*.



## 4.2 ULL 2: New Light on Alby Hill

### Summary of the Urban Living Lab

The second ULL in Alby, “New Light on Alby Hill”, was implemented during the autumn and winter of 2014/2015. The ULL focused on how using new LED technology and light installations could turn a pathway for pedestrians in Alby Hill, currently perceived as unsafe, into a more attractive and frequently used area. The chosen pathway had been identified by residents in previous surveys and safety walks as a prioritized area. The lighting – consisting of ambient light and projection of four images (light installations) on the pavement and stone walls along the pathway– was planned, designed and implemented together with local residents and other stakeholders. The newly formed Residents Council (Borådet) in Alby Hill was involved in the planning of the ULL as a whole and the design of ambient light, while all interested residents and stakeholders contributed with images for the light installations under the theme “Our Alby”. The winning images were chosen by the residents through an open voting on the ULL website [www.nyttljus.eu](http://www.nyttljus.eu) and with QR-code posters/leaflets.

The goals with the ULL were to improve the residents’ sense of security in the area; to create a more energy efficient street lighting using LED technology and ambient light; and to open up to greater engagement and participation among Alby Hill’s residents and other stakeholders in order to facilitate future dialogue processes.

The ULL “New Light on Alby Hill” was implemented as collaboration between Botkyrka municipality, Mitt Alby (private housing company), College of Arts and IVL.

For more information on the selection process of the ULL “New Light on Alby Hill”, see *D 3.1 & 3.2 Selection of Urban Living Labs in Alby and Peltosaari* [SubUrbanLab, 2015] (available at [www.suburbanlab.eu](http://www.suburbanlab.eu)).

### Establishment and implementation of the ULL

The detailed planning of the implementation of ULL “New Light on Alby Hill” started in September 2014 (Meeting minutes 2014-09-03), after a final project plan (developed idea) had been discussed with the Residents Council representatives and been accepted by all ULL-partners (IVL, Botkyrka municipality, Mitt Alby and College of Arts). During the first implementation meeting with the ULL-team, based on feedback from the residents Council and discussions with municipality representatives active in Alby, the ULL-partners decided on a theme for the images to be projected along the pathway (light installations). It had been underlined as important that the theme should be something positive and take the identity of Alby as its point of departure. Therefore the suggested theme for the images was “Vårt Alby” (“Our Alby”) (Meeting minutes 2014-09-03).

The tentative deadline for submitting image contributions was set for the end of November, with the aim to finalize the voting by the end of December 2014. A suggestion was also made to project one or two images as examples until the voting was finalized, to show how the end-result could look in order to encourage residents and other stakeholders to get involved. It was also decided to set up a website for the ULL, where information could be spread to residents and stakeholders, feedback collected and where the voting of contributed images could take place. Furthermore, as a next step, it was suggested that different stakeholders, such as the

Youth Clubs, the schools and cultural organisations, in Alby were to be targeted with information about the ULL and the possibility to contribute with images (Meeting minutes 2014-09-03).

The challenges identified at this stage was how to reach the residents and stakeholders and encourage them to contribute with images, but also that getting hold of the LED-technology appropriate for an ambient light approach could be an issue. The availability and delivery time of the technology was uncertain making the implementation of other activities according to the time plan challenging (Meeting minutes 2014-09-03).

In the end of September, a first test-lighting took place with the LED-technology for the image projections (so called gobos) and the potential electric fittings. Two representatives from the Resident Council participated, giving their feedback. The result of the test lighting was a decision that other, more suitable, electric fittings needed to be tested (Meeting minutes 2014-09-25).

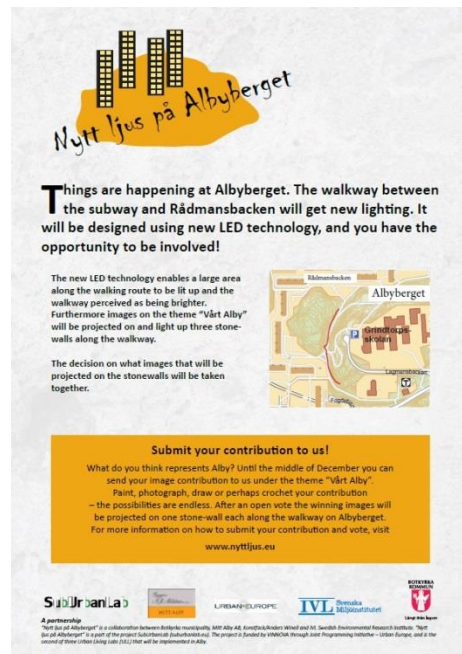
In early October, a number of stakeholders around Alby were consulted in order to get their input, and increase their interest, concerning the light installations. The Project Manager for the cultural project Do It Together (D.I.T) at Subtopia, the cultural centre and creative cluster in Alby, was positive and offered to spread information in his network about the possibility to contribute with images (Meeting minutes 2014-10-06). The ULL-team also met with the art teacher from the local school on Alby Hill, who was very interested in engaging her students in contributing with images for the light installations. During the meeting, it was decided that one or two projections along the pathway would be earmarked for images created by students from the schools, to increase the incentive for the students to contribute with images (Meeting minutes 2014-10-06). Based on previous decision to project images along the pathway as examples until the voting was finalized, the organisation “Orten skriver” (“The Writing Neighbourhood”) was also contacted in order to find a suitable text or poem written by a young local talent. The idea was then to illustrate the text or poem and use it as one of the example images, an idea supported by “Orten skriver” (E-mail 2014-10-08; 2014-10-10).

After a successful second test-lighting in early October, all new LED technology to be used along the pathway was ordered from the supplier, however, as the delivery time was longer than expected the installations of the electrical fittings had to be postponed until the beginning of November 2014 (E-mail 2014-10-07). As a result, it was decided by the ULL-team to postpone the external communication to encourage residents and other stakeholders to send in their image contributions on the theme “Vårt Alby” until the delivery of the LED-technology had been confirmed. The new tentative deadline for submitting images was set at December 6 (E-mail 2014-10-10).

Over the next few weeks, the communication materials were developed, produced and prepared. The materials included a press release, the ULL-website, an information leaflets and posters (E-mail 2014-10-29; 2014-11-03; 2014-11-05; 2014-11-07; 2014-11-11).

Most of the new LED technology had arrived by early November, and a test-lighting was carried out on the 11<sup>th</sup> of November. However, some last components were still missing, promised to arrive in mid-November, after which installation was planned to start (E-mail 2014-11-11). Due to the further postponement of the delivery of the technology, the deadline for submitting images was postponed until 13th of December (E-mail 2014-11-11).

Communication to the residents and other stakeholders started mid-November. The information leaflets encouraging residents and others to submit their images on the theme “Vårt Alby” before December 13<sup>th</sup> were sent to all residents on Alby Hill and posters with the same message put up all over Alby with help from students from the local school. A press release was disseminated to local media and in other networks. Information leaflets were also electronically sent to different stakeholders (such as schools, kindergartens and local organizations) in Alby through established municipality networks. Furthermore, the ULL website ([www.nyttljus.eu](http://www.nyttljus.eu)) was launched and news posted on the municipality website as well as on Mitt Alby website. The ULL website was based on the co-creation online tool OWELA, developed by VTT, to allow interactions with and between stakeholders regarding the new lighting. The interaction included the possibility to comment on updated information, and at a later stage to vote on the final images. However, the main goal with the website was to make information about the ULL and its progress available to the public (E-mail 2014-11-14; 2014-11-18; 2014-11-19; 2014-11-24).



### *Poster encouraging residents and others to submit their images*

During November, the work with developing examples images was also underway. After an initial difficulty to get in touch with the youth who had written the chosen poem, the poem was later illustrated and coloured to serve as an example and to be projected on one of the stone walls along the pathway. Another image was also developed, with a plain text encouraging the people passing by to get involved in the project (E-mail 2014-11-17).

Due to technical problems, the installation of the LED technology was further delayed. On the 1st of December, the new technology was finally in place. The gobos (projection technology) with the example image and the text projections were installed on December 9th (E-mail 2014-11-19; 2014-11-25; 2014-11-28; 2014-12-08). Due to the last-minute technical problems the deadline for the residents and other stakeholders to submit images was pushed until January 1st 2015. This was communicated mainly through the ULL-website (E-mail 2014-12-08).

By the beginning of January 2015 a total of 20 images had been submitted, of which 18 were created by students from the local school (E-mail 2015-01-07). The ULL-team, with the light experts in the lead, made a first selection of the images based on e.g. how the images had interpreted the theme “Vårt Alby” and what types of images would be most appropriate to project given the conditions along the pathway (e.g. structure and shape of projection surface). Six images were selected as finalists to be voted on online or through QR-code in order to find two “winners” (E-mail 2015-01-09; 2015-01-19). From the non-finalist images from the local school, a jury with representatives from all ULL-partner organizations selected four images to be rotated (changed every few weeks) onto two of the projection locations (E-mail 2015-01-19; 2015-02-26; 2015-03-05).

The external communication to residents and other stakeholders to encourage them to vote on the final images either on the website or with QR-code started in mid-February. Information leaflets were produced and put up in all staircases on Alby Hill and electronically sent to stakeholders around Alby. Posters with the QR-codes were put up around Alby. The information was also updated on the ULL-website, and news posted on the municipality website and Mitt Alby website. The deadline for the voting was decided to March 8th. (E-mail 2015-02-12; 2015-02-16; 2015-02-20).



*Poster encouraging residents and other stakeholders to vote on their favourite image*

To have some time to prepare and transfer the winning images from paper (original) to a plastic film to use for the projection, an opening ceremony was decided by the ULL-team to take place on the 19<sup>th</sup> of March at 7 pm (at dusk) (E-mail 2015-02-12 ;2015-02-13; 2015-02-17; 2015-03-10). The voting was closed on the 8th of March. Approximately one hundred votes had then been collected through the website and via QR-code (E-mail 2015-03-09). The external communication about the opening ceremony also started in the beginning of March, with notifications on the project website, Mitt Alby website and the municipality website and Facebook. Local media was also contacted (E-mail 2015-03-12). Due to high interest from media, a preview of the winning images projected on the stone walls and pavement was held on March 17<sup>th</sup>, where media was invited to write about the ULL and the upcoming opening



ceremony. Local newspaper Södra sidan and local TV-news station ABC attended the preview to make a feature/article. The two winners from the online/QR-voting also attended, as well as around ten students from the local school, a politician from the municipality and several ULL-partner representatives. All attending stakeholders were very positive towards the new light and the projection of images (Meeting minutes 2015-03-17). The feature on the regional news and the article in the local newspaper were released the next day.

The opening ceremony took place in the evening of March 19th, where the winning images were officially projected along the pathway for the first time. The ULL-team served refreshments, coffee and cake, and four images (on two stone walls and two spots on the pavement) were lit. Around 30 residents stopped by to look at the images and to talk to the ULL-team. The opening ceremony was also visited by the owner of Mitt Alby as well as the head of the municipal executive board. All guests were positive and there were many positive comments about the new light and light installations (Meeting minutes 2015-03-19). The opening ceremony also concluded the ULL “New light on Alby Hill”. The winning images continued to be lit along the pathway during the rest of the year (2015), and the four jury-selected school images have rotated on the two stone walls.



*One of the final images projected on a stone wall along the pathway*

For the evaluation and lessons learned from the Alby ULL “New Light on Alby Hill”, see D. 4.1. & 4.2 *Evaluation of the Urban Living Labs in Alby and Peltosaari*.

### 4.3 ULL 3: Vacant Space Alby

#### Summary of the Urban Living Lab

Alby ULL 3 “Vacant Space Alby”, implemented September 2014 – September 2015, focused on identifying possible temporary (10-15 years) uses for a vacant space in Alby Centre, together with residents and other stakeholders. The vacant space, a former school ground, has been empty and not in use since the school was demolished in 2009. The long-term plan for the space is to build residential buildings. However, since the area will be affected by the lowering of the connecting Alby road, a measure that is planned to take place in 10-15 years’ time when the road has reached its service life, the space needs a temporary short-term use. Residents and other stakeholders have been involved in the ULL using workshops and online-discussions on the ULL website. The suggestions for temporary uses of the space, developed together with residents and other stakeholders, have been summarized in a report, together with ideas on financing, and submitted to the decision-makers in Botkyrka municipality.

The goals of the ULL were to plan and carry out a dialog with affected residents and stakeholders; try new methods for participation (web based); develop and test the Alby District Group’s ability as an organization to carry out an ULL; and to develop a number of suggestions for possible temporary uses for the vacant space.

The ULL “Vacant Space Alby” was implemented by the SubUrbanLab project partners in Sweden, IVL and Botkyrka. From Botkyrka municipality, the involved organization was the Alby District Group. The District Group in Alby is responsible for strategic planning of the developments in the district, in dialogue with residents and other stakeholders. Their task is also to coordinate the different stakeholders in the district, including the different municipality administrations/companies and their cooperation partners, to make sure their regular assignments are implemented successfully. Alby District Group consists of representatives from all municipal administrations, the police, the local housing companies and the local culture cluster Subtopia.

For more information on the selection process of the ULL “Vacant Space Alby”, see *D 3.1 & 3.2 Selection of Urban Living Labs in Alby and Peltosaari* [SubUrbanLab, 2015] (available at [www.suburbanlab.eu](http://www.suburbanlab.eu)).

#### Establishment and implementation of the ULL

The final project plan was agreed on by all involved project partners (IVL and Alby District Group) in the middle of October 2014 (Meeting minutes 2014-10-15) when the continued ULL implementation was discussed more in detail. However, a more detailed planning and co-creation with residents and other stakeholders had already started in the summer of 2014.

During the summer of 2014, two interns at Alby District Group carried out short interviews with residents in Alby residing around public places. In total, 242 residents were asked the question “What do you think the former Alby school ground should be used for?”. Of the interviewed residents, 51 % were women and 49% were men while 47 % were younger than 20 years and 53 % were older than 20 years. The suggested uses that most residents in Alby proposed were 1) different sports activities (e.g. Outdoor gym, indoor swimming pool and football field), 2) residential buildings and 3) playground or park. Women were more positive

towards building a playground while men to a higher degree suggested the space to be used for various sports activities (See Figure 1). Those under 20 years also preferred to see the space used for various sports activities, while people older than 20 years preferred residential buildings or playground / park to be built on the space (Interview analysis 2014-09-18). Later, the summary from the interviews were also uploaded onto the ULL-website.

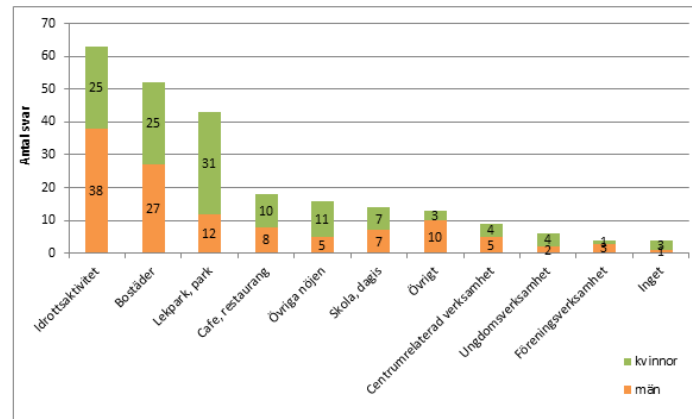


Figure 1: Result of interviews with residents' summer 2014

In August, a decision was made in a discussion between Alby District Group and the property administration of the municipality that a temporary kindergarten would be built on parts of the vacant space. This posed a challenge to the ULL as the use of parts of the space would be planned without involvement of residents, which could jeopardize the legitimacy of the co-creation. On the other hand, there was an acute local need for a temporary kindergarten as child groups were increasing in Alby, and the former Alby School ground was one of few available spaces. As a result of the discussion, the need for a temporary kindergarten was prioritized but with a promise that the Alby District Group and ULL could have influence on the placing and design of the Kindergarten (Meeting minutes 2014-08-26).

During meetings in August between the ULL project partners, other challenges identified were how to create a temporary space that enables long-term use and does not create obstacles for the later changes, for example by residents getting too attached to the temporary uses creating a conflict for the permanent residential buildings. Also, the Alby District Group has during many years built trust among Alby residents through earlier participation and dialogue. This capital of trust might be lost if the suggestions for temporary uses put forward as a result of the co-creation are later not implemented due to other prioritize in the municipality, beyond the scope of the ULL and the responsibility of the Alby District Group (Meeting minutes 2014-08-26). Hence, there was a need to already from the start weigh the needs and wishes from residents and other stakeholders with the municipality development goals and needs in the area in discussion with the municipality decision-makers (Meeting minutes 2014-08-27). In order not to lose trust from the residents, it was underlined by the Alby District Group as important to have an open and clear communication with the involved residents and stakeholders about the boundaries and limits for the temporary use of the vacant space, e.g. that the suggestions need to be possible to finance and that the uses must comply with the sustainability development goals for Alby district (Meeting minutes 2014-09-12). During the meetings in August, the ULL-team also discussed the methodology for involving residents and other stakeholders with a decision that workshops with affected residents and

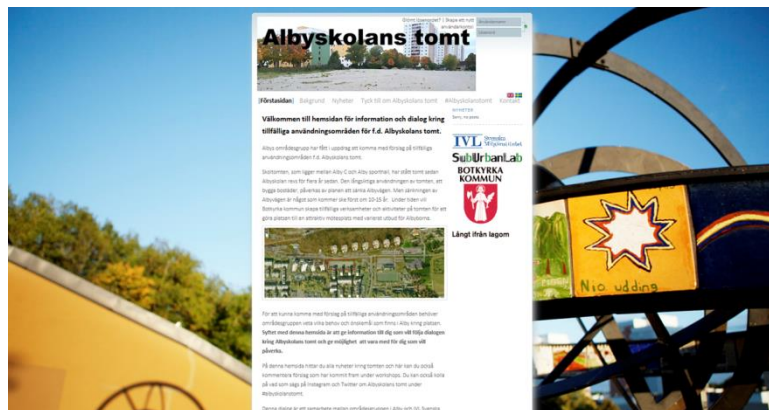
stakeholders would be an appropriate method for the co-creation. A first, more informal and open ended, workshop with municipality officials and other stakeholders (such as representatives from housing companies and established larger local Civil Society Organizations (CSO)) was been decided for mid-September to get initial thoughts on the potential temporary uses for the space (Meeting minutes 2014-08-26; 2014-08-27)

In September 2014, the ULL-team also decided to set up a co-creation website (OWELA) for the ULL “Vacant Space Alby” in order to enable discussions and co-creation online as a complement to the interviews and upcoming workshop discussions (Meeting minutes 2014-09-12).

On 23rd of September, a first workshop on the topic of temporary uses of the former Alby School ground was held at the premises of Subtopia in Alby. Participating in the workshop were around 30 representatives from different administrations of the municipality and other stakeholders, such as local housing companies and local CSOs. A group with local youths had also been invited to participate, but had to cancel last minute. Topics discussed included both the suggested plan for the ULL process, but the invited participants also gave their views on what the vacant space could temporarily be used for. The workshop started with a presentation of the Alby District Group and IVL, the purpose of the ULL and the boundaries and limitations of the temporary use of the vacant space in Alby. This was followed by a presentation of the general long-term urban planning idea for Alby (adopted in April 2014 after extensive dialogue with residents and stakeholders), the plan for the temporary kindergarten that will occupy parts of the space as well as the results from the interviews carried out with residents in Alby earlier during the summer. During the presentations, the workshop participants underlined that: 1) it is important to make the uses and activities clearly temporary and easy to remove or move as the space will have a different long-term use (representative from City Planning Department), 2) that the temporary Kindergarten should be integrated with the temporary uses of the remaining space, and that the space needs to be perceived as safe day and night as it is part of a passage residents use to for from the Alby Centre to the Sport Centre and Cultural Centre Subtopia (representative from Subtopia), 3) that the suggestions of the vacant space need to take into consideration the developments at Alby Sports Centre, where a Public Health Park will be created during the spring/summer of 2015. The park will include many of the sports activities suggested for the Alby vacant space by the interviewed residents in Alby the summer 2014 (representative from the Culture and Leisure Time administration). Next, the participants discussed how the vacant space could be used temporarily for the next 10-15 years in order to create a sustainable and attractive location for people in and outside Alby. The topic was discussed in groups from different point of views, including public space, public health, commercial perspective and culture. Suggestions raised included activity parks, temporary residential- and commercial buildings, a café and playground for children (Meeting minutes 2014-09-23). After the workshop, all suggestions from the participants were summarized and illustrated (Workshop proceedings 2014-09-23). Later, the summary and illustrations were also uploaded on the ULL website <http://www.albyskolanstomt.se>

During a meeting between the ULL-team in October 2014, the continued co-creation was discussed. It was decided that the website should be launched as soon as possible for dissemination of information about the ULL and to enable further discussions online. It was

also decided that a number of smaller workshops would be carried out ahead with a selection of affected residents and stakeholder groups. Identified important residents and stakeholder groups to invite included the residents living in the buildings surrounding the vacant space, the Association of Alby Organizations and the youth sport organization Konyaspor (involved in the developments of the Public Health Park in Alby). The importance to have a gender perspective was also discussed, and it was underlined that young women and girls are an important group to reach, as they are often passive or underrepresented in other participation efforts. The parents to kindergarten children were also identified as a prioritized group to involve. The aim was also for the information about the ongoing co-creation for temporary uses of the former school ground to be available to all residents online, where all residents would have the opportunity to provide their input. The layout of the website was also discussed during this meeting, with the aim to launch the website within the next weeks. It was decided that to provide the website in English and Swedish was sufficient (meeting minutes 2014-10-15).



ULL “Vacant Space” interactive website

As a next step, identified stakeholders and residents were to be contacted and proposed to participate in a workshop. Besides the residents and stakeholders groups already identified, the new Youth Club in Alby was also added to the list of a potential stakeholder to be offered a workshop to discuss the future temporary use of the former school ground. Three potential workshop dates (20 November, 2 December, 11 December) were suggested by the ULL-team as a preparation for the invitation. A workshop invitation was developed to be used to engage the identified stakeholder groups. In total, it was decided to invite the following six resident- and stakeholder groups to participate in one workshop each: the Association of Alby organizations, youth sport organization Konyaspor, Alby Parents’ Organization, Residents living in buildings in connection to the space (including The Swedish Union of Tenants), young women as well as stakeholders and youths from the new Alby Youth Club ”Grunden”. First to be contacted were the representatives for residents living in connection to the space and the Association of Alby organizations (Meeting minutes 2014-10-20; E-mail 2014-11-07; 2014-11-11).

An agenda for the upcoming workshops were further discussed during a meeting in November. It was underlined that it is important to clearly communicate the aim of the workshop and the boundaries of the suggested temporary uses of the space. The participants’ most valuable input was their wishes and needs for the vacant space in the future, but also



how the space was currently used. A number of questions and materials (maps and illustrations) were prepared for the workshops (Meeting minutes 2014-11-12).

The contact persons for the residents living in the residential buildings surrounding the vacant space were contacted, who responded with a promise to get back to the ULL-team with a possible date. The ULL-team also decided to put up notifications with contact information in the entrance to all identified buildings to find interested residents to participate in an upcoming workshop when a date had been set (Meeting minutes 2014-11-12).

After contacting the Association of Alby Organization, they invited the ULL-team to hold a workshop in connection to their annual meeting on the 20th of November 2014 at their association premises (E-mail 2014-11-13; 2014-11-14). During the workshop, eight representatives from different organizations (CSOs) in Alby participated. The represented organizations included the Pakistani Organization, the Islamic Federation and the Parent Organization for Urban Youth. During the first part of the workshop, the background to and aim with the workshop was explained as well as the boundaries for the suggested temporary uses of the vacant space. Subsequently, the question of what the vacant space temporarily could be used for was discussed. Suggestions from the participants included a temporary space for weddings and parties, temporary residential buildings for students or families in need of a home and activities that can create job opportunities for youth (Meeting minutes 2014-11-20). After the workshop, all suggestions from the participants were summarized and illustrated (Workshop proceedings 2014-11-20). The summary and illustrations were then uploaded on the ULL website.



*Workshop with Association of Alby Organization*

A date for a workshop with residents living in the buildings surrounding the vacant space was decided for December 11. The representatives from the local The Swedish Union of Tenants and the affected Housing Cooperative were invited via e-mail (E-mail 2014-12-01). Furthermore, notifications for the upcoming workshop were also put up in all the entrances of residential buildings in connection to the vacant space, with the request to notify interest to participate via e-mail (E-mail 2014-12-04).

The youth sport organization Konyaspor was also contacted in end November, and a workshop was decided to take place with the organization on 3rd of December 2014 (E-mail 2014-11-24; 2014-12-01). During the workshop, two representatives from Konyaspor participated. A number of youth taking part in different sport activities organized by

Konyaspor had also been invited, but cancelled their participation last minute due to other engagements. Like previous workshops, the workshop started off with the background to and aim with the workshop and the boundaries of the future use of the vacant space, after which the participants gave their view of what the space could be used for in a short-term perspective. The suggestions from Konyaspor included temporary residential buildings, for example for youth, or temporary office buildings to attract new innovative companies to Alby. The representatives from Konyaspor underlined that it was important that the space, a passage to get to the new Public Health Park, would be perceived as safe by all generations both day and night, and that the temporary uses of the vacant space need complement, not compete with, the new activities to be implemented around the Sport Centre as part of the new Public Health Park (Meeting minutes 2014-12-03). After the workshop, all suggestions from the participants were summarized and illustrated (See Figure 2) (Workshop proceedings 2014-12-03). The summary and illustrations were then uploaded on the ULL website.

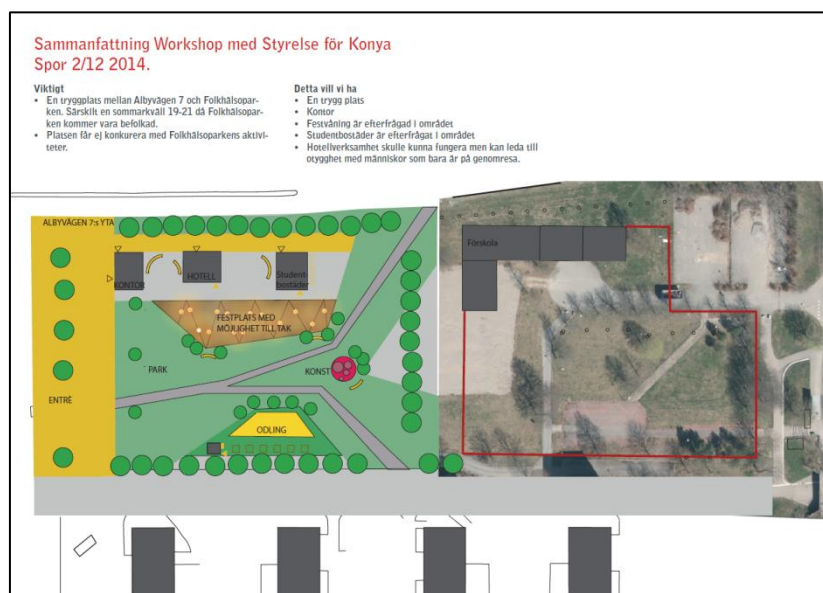


Figure 2: Illustration of suggestions made by Konyaspor

Due to lack of response and/or availability among residents, the planned workshop on the 11th of December was cancelled. A new time was decided to be set later in January (E-mail 2014-12-08). However, two residents got in touch via e-mail to give their input on the temporary use of the vacant space (E-mail 2014-12-08; 2014-12-09).

The responsible representative for the Youth Club in Alby, Grunden, was contacted with a suggested date (16 December) for a workshop with youth using the Youth Club. At the time the Youth Club were using temporary premises in wait for the new premises on Albyvägen 7. The new premises, to be finalized in summer 2015, are located in close connection to the vacant space why the youths are an important group to get input from on the temporary uses and activities of the vacant space. However, due to weak interest from the youth the workshop was cancelled (E-mail 2014-12-10; 2014-12-15).

In January 2015, the Alby Parents' Organization was contacted and invited to participate in a workshop to discuss the temporary use of the vacant space. After a positive response from the representatives from the Parents' Organization, a workshop date was set for the 10th of February (E-mail 2015-01-16; 2015-01-23; 2015-01-27). Two representatives from the Alby

Parents' Organization participated in the workshop. However, the participants had discussed the vacant space during a meeting the previous day together with other members, and gotten feedback from members through the organization's Facebook-group. During the workshop, the aim and boundaries of the vacant space were presented and the views of the participants on temporary uses for the space discussed. The representatives from the Alby Parents' association underlined that it was important for the vacant space to get integrated with the temporary kindergarten, and that there should be activities for children in all ages. Activities and functions such as a paddling pool for children and a playground were highlighted. They also put forward that the space should encourage new meetings and contact between people, and facilitate engagement among the residents (Meeting minutes 2015-02-10). After the workshop, all the discussion and suggestions were summarized and illustrated (See Figure 3) (Workshop proceedings 2014-02-10). The summary and illustrations were then uploaded on the ULL website.

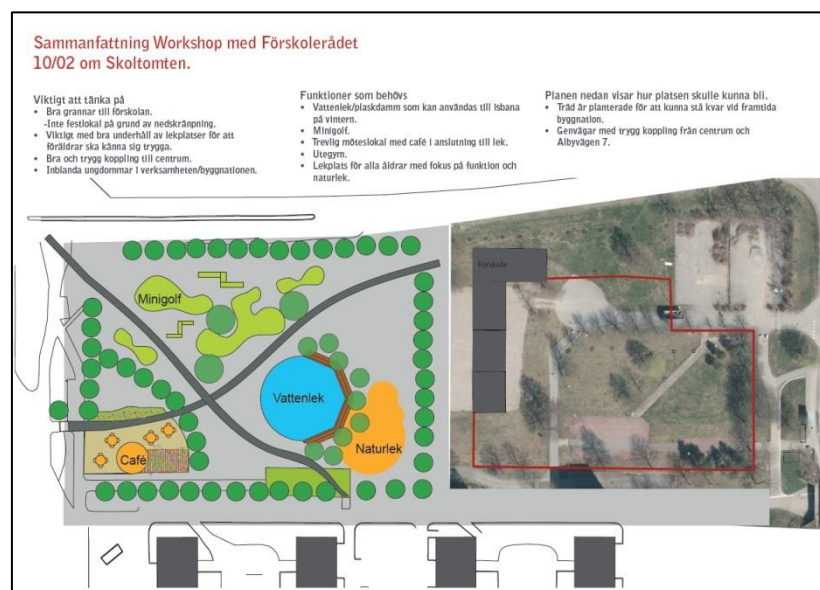


Figure 3: Illustration of suggestions made by Alby Parents' Organization

A workshop with young women also got planned in February, in connection to another workshop to be held with young women about the new Public Health Park. After a last-minute change of dates, the workshop with young girls was held on the 12th of February 2015 (E-mail 2015-01-30; 2015-02-02; 2015-02-09). During the workshop, five young women in the ages between 19-23 years participated giving their view of the future temporary use of the vacant space. The participants highlighted that the space today was perceived as a very unsafe space, and was mostly used by people (men) to walk their dogs. Hence, it was underlined that the space in the future, no matter what temporary use, must be seen as a safe area. The participants also saw a great need for temporary apartments for young people to enable youth in Alby to get their first own home (Meeting minutes 2015-02-12). After the workshop, all the suggestions were summarized and illustrated (Workshop proceedings 2014-02-12). The summary and illustrations were then uploaded on the ULL website.

A new invitation for a workshop with residents living in the buildings surrounding the space, with a new date in March, was sent out to the residents' representatives via e-mail and put up in the entrances of all affected buildings (E-mail 2015-03-06). However, due to lack of response and interest, the workshop got cancelled. The residents were instead encouraged to



give their input through the ULL website (E-mail 2015-03-17; 2015-03-19). No new input or discussions were added to the ULL-website after this encouragement.

The cancelled workshop with residents concluded the workshop “tour” with affected residents and stakeholders in Alby. The ULL-team experienced that all affected stakeholders and residents had been consulted, or given an opportunity to participate in a workshop. After 250 interviews and five workshops, the ULL-team experienced that similar or same suggestions had recurred between workshops, indicating that most needs and wishes had been raised. Next, the ULL-team worked on summarizing all the input from the residents and stakeholders in order to develop one or more main suggestions for a temporary use of the former Alby school ground, based on the residents and stakeholder input and wishes (Meeting minutes 2015-03-31). As a first step, all suggestions highlighted during the workshop were put together and made into a so called “Word Cloud” (see Figure 4). The larger the word in the Word Cloud, the more times the suggestion has been put forward by involved residents and stakeholders.



Figure 4. Word cloud on all suggestions provided by residents and stakeholders during the dialogue.

To be able to value all the input from the residents and stakeholders and come up with one or more main suggestions for a temporary use of the vacant space, a number of criteria's were developed by the ULL team. The criteria's were based on boundaries and prerequisites highlighted as important from the municipality point of view, but also on input received from residents and stakeholders during the workshops. According to the criteria's, the temporary use of the vacant space should (Botkyrka kommun, 2015):

- contribute to Alby's long-term development plan;
- be in line with the long-term urban planning idea for Alby;
- be clearly temporary;
- complement and not compete with the new Public Health Park, the new Youth Club premises, the cultural centre Subtopia and commercial activities at Alby Centre;
- complement the temporary kindergarten;
- take into account the living conditions of the residents living close to the vacant space,
- be possible to finance through internal or external funds;
- create an exciting place with daring architecture and aesthetics

After having valued all suggestions from the residents and stakeholders against the criteria's, the number of suggested temporary uses decreased (see Figure 5). Based on this analysis, the

ULL-team decided to focus on two main suggestions: a combination of temporary apartments and facilities with daring architecture and aesthetics, as well as a park with different functions. Together, the proposals aimed at creating a new positive identity to the place. The ULL process and two main suggestions for the temporary use of the vacant space including an illustration (see Figure 6) were put forward in a report and submitted to the General Director of the municipality (Botkyrka kommun, 2015).



Figure 5. Word cloud on suggestions provided by residents and other stakeholders after evaluation according to criteria.

After the finalization of the report and submission to the General Director, two feedback activities for the residents and stakeholder who had participated in the ULL-process were planned. First, an internal feedback meeting with municipality representatives participating in the first workshop on the 23<sup>rd</sup> of September 2014 as well as the Alby District Group members got planned for the 28<sup>th</sup> of May 2015. The aim with the internal feedback meeting was to discuss the ULL-process and the result, as well as to make an evaluation of the ULL goals. Secondly, an external feedback meeting was also decided to be carried out the participants from the other four workshops with the aim to present the results and give the participants the opportunity to ask questions about the main suggestions and the ULL-process. The time for the external meeting was not decided at this time as the ULL-team wanted to wait for the first response from the General Director before communicating the results externally to the residents (Meeting minutes 2015-04-14; E-mail 2015-04-16; 2015-05-08; 2015-05-12;).

During the internal feedback meeting on the 28<sup>th</sup> of May 2015, the ULL process and results of the ULL were presented by the ULL team. The participants were positive towards the main suggestions developed based on resident and stakeholder input, and especially appreciated the suggestion of temporary apartments in line with needs participants themselves have identified in their municipality administrations (Meeting minutes 2015-05-28).

Due to internal municipality discussions and a request from the General Director for some clarifications, the external feedback meeting was postponed until after the summer (E-mail 2015-06-03; 2015-06-15). In the meanwhile, an e-mail was sent to all residents and stakeholders that had participated in the four last workshops with information that a feedback meeting would take place after the summer (2015-06-24).

A new time for a feedback meeting with residents and stakeholders was decided for the 17<sup>th</sup> of September (Meeting minutes 2015-08-27) and an invitation to all residents and stakeholders that had participated in the four last workshops was sent out via e-mail (E-mail 2015-08-28). However, due to low interest and possibility to attend the feedback meeting it got cancelled

(E-mail 2015-09-16). Instead, all invited participants were sent a copy of the report via e-mail with an encouragement to get in contact with feedback if any (E-mail 2015-09-17). No additional feedback was provided to the ULL-team.

The possible implementation of suggest temporary uses of the vacant space, developed in co-creation with residents and other stakeholders, is a decision to be made by the decision-makers in Botkyrka municipality. At the time of writing this report, no decision had been made due to the need for more in-depth discussion between the decision-makers concerning the future of the vacant space.



*Figure 6: Illustration of final suggestion for temporary use of the vacant space in Alby*

For the evaluation and lessons learned from the Alby ULL “Vacant Space Alby”, see D. 4.1. & 4.2 Evaluation of the Urban Living Labs in Alby and Peltosaari.

## 5 URBAN LIVING LABS IN PELTOSAARI – ESTABLISHMENT AND IMPLEMENTATION

In this chapter the establishment and implementation process of the three Urban Living Labs (ULL) that have been carried out to support development of Peltosaari area in the city of Riihimäki, are presented. First, a short summary of the focus of each ULL is presented, after which the process of establishment and implementation is put forward. The themes of the ULLs in Peltosaari are:

- Energetic co-operation (ULL1)
- Sustainable decisions (ULL2)
- Together more (ULL3)

The description of each ULL is based on the meeting minutes and other documentation (such as e-mails) from the ULL process.

### 5.1 ULL1: Energetic co-operation

#### Summary of the Urban Living Lab

The Peltosaari ULL1 “Energetic co-operation” was planned to be implemented during July 2014 – June 2015 (as defined in D3.1 & D3.2) but due to several delays in the ULL the activities continued until November 2015. The focus was on improving energy efficiency of the buildings in the area through resident-oriented energy saving and technological solutions. A majority of the buildings in Peltosaari were built in 1970-1980. They are multi-storey blocks of flats with electric heating. Electricity expenses are included in the rent as a lump-sum in the contracts with the rental housing company, Riihimäen Kotikulma Oy. Thus the residents are not aware of their energy consumption and the consumption doesn’t have direct impact on their monthly living expenses. Consequently, the energy costs in the area are quite high.

The objective of the ULL was to improve energy efficiency in the buildings administered by Riihimäen Kotikulma Oy. The aim was to identify the most promising and efficient ways to decrease energy consumption, to inspire co-development of ideas to improve energy efficiency and to test some solutions in practice, in collaboration between the residents, solution providers, the housing company, city officials and researchers. Interesting topics defined in the plan of the ULL included both the practices of the residents that have impact on energy consumption and technological solutions that could decrease energy consumption in the buildings. The so called Innova house (Saturnuksenkatu 2) was selected as case study for the ULL in September 2014, after discussions among Kotikulma, City of Riihimäki and VTT (meeting minutes 2014-09-26). The building had been renovated to Finnish passive house standard in 2012. The full potential in energy efficiency has not yet been reached, but with some further adjustments and collaboration with the residents good progress can be gained. As a first step, more detailed information of energy consumption was needed, in order to be able to recognize excessive consumption and to raise residents’ awareness.

The ULL “Energetic co-operation” was implemented by the SubUrbanLab project partners in Finland: City of Riihimäki and VTT. Additionally active participation was necessary from other key stakeholders: Riihimäen Kotikulma Oy, residents and providers of technological solutions. During the work it became obvious that especially the housing company Riihimäen Kotikulma Oy is in key position in implementation. However, the company had not been involved in the first phases of the project and during the selection process the roles and responsibilities were not sufficiently defined. No resources were allocated for the work at Kotikulma and the ULL was not directly part of personnel’s everyday work which affected the progress of the ULL.

For more information on the selection process of the ULL “Energetic co-operation”, see *D 3.1 & 3.2 Selection of Urban Living Labs in Alby and Peltosaari* [SubUrbanLab, 2015] (available at [www.suburbanlab.eu](http://www.suburbanlab.eu)).

### Establishment and implementation of the ULL

The detailed planning of activities within ULL “Energetic co-operation” started in May 2014 (Meeting minutes 2014-05-22), after the developed idea of the ULL was approved in the project work meeting (2014-03-03) and in the Steering Committee meeting (2014-03-04). Already during 2013, several meetings were held with representatives of Riihimäen Kotikulma Oy and with suppliers of energy metering and management solutions, as described in Deliverable 3.1 & 3.2. The discussions with the solution providers were essential for exploring potential technological alternatives for improving energy efficiency (and/or decreasing environmental load) and discussing companies’ interest in participating in potential pilots in Peltosaari. Discussions with Kotikulma supported setting up collaboration, allowing the company to consider what are their priorities and opportunities to participate and to allocate resources for the work. Additionally, a dialogue with a private investor Y-K Oy, that has acquired two apartment buildings in the area from the city, was initiated, and the owner informed the project team about the development plans in the area and participated in some meetings with technology suppliers. The suppliers and their technological solutions that were acquainted with in the ULL and presented to Kotikulma are listed in Table 1.

*Table 1. Technological solutions introduced in the ULL for improving energy efficiency*

Company	Solution(s) discussed	Meeting
Riihimäen Kaukolämpö Oy	District heating utilizing >80% energy recovered from waste (Change from electric heating)	2013-09-26
ENTOS Optimisääto Oy	Echolog (Abelko Innovation) energy monitoring system for apartments (electricity, cold and hot water consumption)	2013-10-04 *
Schneider Electric	Metering for energy consumption, new control system, heat recovery from exhaust air, technology for future renovations	2013-10-09 2013-11-25 *
Ceruus Oy	IoLiving temperature-tracking device and web service	2014-05-15
Rettig ICC	New heating elements and radiators, control system	2013-11-25 *



Opti Automation Oy	OptiWatti temperature monitoring and (distant) controlling system	2015-08-19
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\* a representative from Riihimäen Kotikulma Oy participated in the meeting

The planned activities of the ULL have been adapted during the implementation phase to conform to the scarce resources, everyday operations and schedules of Kotikulma.

Installations of more detailed measurements of the energy consumption (ideally apartment-specific electricity and hot and cold water consumptions) were planned to three Kotikulma buildings: Saturnuksenkatu 2, Otavankatu 4 and Marsinkatu 6 (meeting minutes 2014-05-22). The idea was to gather data during one calendar year (July 2014 – June 2015) so that there would be data available for comparisons and visualisations that could be presented as initial information material for residents in workshops. More detailed data on consumption would also enhance identification of most efficient ways to decrease consumption. The installation of the metering was delayed until November 2014. Even after that there have been challenges in gaining complete data sets of sufficient quality for further analysis and visualisation.

Since Kotikulma was not able to allocate much resources for the ULL, decision was made by Kotikulma, City of Riihimäki and VTT to focus the efforts on one building. Innova house (Saturnuksenkatu 2) was selected as primary target for the ULL activities (meeting minutes 2014-09-26). Innova house is a four storey building that was built in 1975 and renovated according to Finnish passive house standard in 2012 [Nieminen and Holopainen, 2014]. The building comprises of three staircases and 37 apartments. A day care for children operates in the ground floor of the building. The overall dwelling area of the building is 2 834 m<sup>2</sup>, and the sizes of the apartments range from 38 to 97,5 m<sup>2</sup> (see Table 2 for more details). The apartments are heated with electric radiators. The target level of the electricity consumption in the building has not been fully reached after the renovation. The residents have informed about over-heating in some apartments but complaints about draught have also been made. It seems likely that further adjustments and balancing of the HVAC system would still be needed to improve the energy efficiency of the building.

*Table 2. Apartments in Innova house [Riihimäki]*

<b>Apartment type</b>	<b>Number of apartments</b>	<b>Area of an apartment / m<sup>2</sup></b>
1 room and kitchen	10	38
2 rooms and kitchen	14	58,5
3 rooms and kitchen	4	76,5
4 rooms and kitchen	9	97,5

Data on the overall electricity consumption of the building from January 2013 - April 2014 is presented in Figure 7. The share of the consumption caused by heating can be estimated based on the consumption during summer months. Nevertheless, more detailed data would be needed for identifying the unnecessary consumption. For example, significant differences in the heating electricity between similar apartments could reveal malfunction of devices or other obvious subjects for improvements.

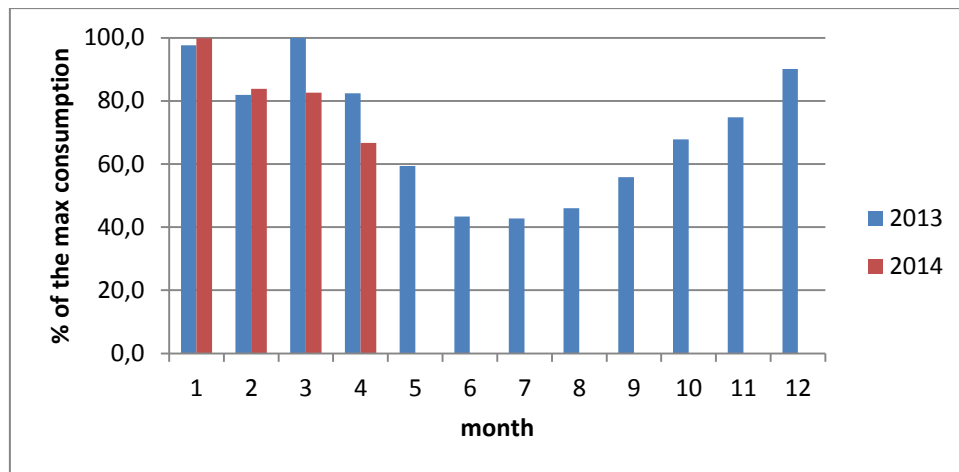


Figure 7: Overall electricity consumption of the Innova-house during Jan2013-Apr2014.

Another example of the potential for energy savings in the buildings is highlighted by the measurements of electricity consumption for lightning in two staircases of the building at Marsinkatu 6. LED-technology with motion detectors is used in the staircase A whereas there are nine traditional fluorescence tubes in the staircase B (see Figure 8). By installing LED-lightning and motion detectors also to the staircase B the overall electricity consumption of the building would decrease by over 2% (consumption of household appliances excluded).

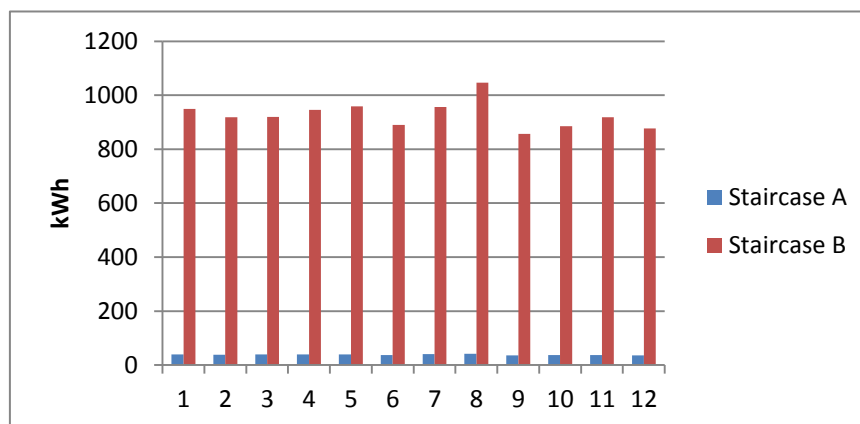


Figure 8: Comparison of the electricity consumption of two staircases of a building, one equipped with LED lightning and motion sensors, the other with the traditional solution.

A brief questionnaire for the residents of Innova house was compiled in October 2014 (several emails as a preparation in October 2014). The aim of the survey was to gather preliminary information about how well the residents are aware of the characteristics of the Innova building, of their own responsibilities in maintenance and about the indoor temperature and air quality in the apartments. The questionnaires were distributed to each apartment of the Innova building on October 31<sup>st</sup>, 2014. There were boxes for filled-in questionnaires in each staircase where the residents were asked to leave the responses. No responses were obtained.

Unfortunately gathering more detailed energy consumption data for the use of the ULL didn't realize in the time frame of the ULL implementation. Therefore after discussions between Kotikulma, City of Riihimäki, VTT and solution providers, other types of activities were

launched to increase awareness of solutions and activities for decreasing energy consumption (numerous meetings, email and phone calls between September 2014 and August 2015).

The discussions with the technological solution providers within the ULL (see Table 1) led to two offers for pilot projects that would support the goals of the ULL: Ceruus Oy offered a pilot project for Kotikulma and Innova house in May 2014 (email 2014-05-06) and Opti Automation Oy in August 2015 (email 2015-08-28). Both systems comprise of improvements for controlling room temperatures with electric heating elements and opportunity for remote monitoring and adjustments of settings. The service providers state that approximately 20-40% savings in heating expenses could be achieved with their systems. Kotikulma has not yet decided on the investment and launching a pilot.

A resident event at Innova house was planned in cooperation between City of Riihimäki, Kotikulma and VTT (meeting 2015-08-13). The aim of the event was to gather ideas and feedback from the residents, to enhance communication and simultaneously to inform about the potential solutions for decreasing energy consumption and about the results of an earlier Innova house project. A brief questionnaire and a draft of a guide leaflet for the residents were prepared for the event. The guide leaflet comprised of basic instructions (a list of seven items) on how to regulate the temperature in an apartment and how to ventilate without impeding the ventilation system. The leaflet also presented the contact information in case of faults or need of guidance. Invitations to the event were delivered to each apartment and put on the notice boards and front doors in the staircases approximately one week before the event. A lottery of a gift card to a cruise among all participants was mentioned in the invitation. The event took place on 23th September 2015 (at 18 o'clock on a weekday) at the premises of the day care in Innova house. In the beginning of the event the participants were asked to fill in the questionnaire while having a cup of tea or coffee. The event then proceeded with brief introductory presentations on a temperature controlling system and on the measurements and studies about Innova house by representatives of City of Riihimäki and VTT. After the presentations the participants were encouraged to tell about their experiences of living in Innova house, to ask questions, give feedback and suggest improvements. The draft guide leaflet was distributed to participants and feedback was asked for.

Four residents came to the event (cf. 37 apartments). Representatives from City of Riihimäki (1), VTT (3) and Kotikulma (1) were present. A summary of the results of the responses to the questionnaire is presented below (complete data in a result document 2015-09-24). One of the participants had lived in Innova house already before the renovation, the others had moved in after the renovation but had lived there more than a year. Table 3 presents the responses to the Yes/No-questions in the questionnaire.



Table 3. Responses to the Yes/No-questions on the questionnaire for residents of Innova house

Question	Yes	No	Yes&No	respondent			
				1	2	3	4
Have you been informed about the energy renovation done on the building?							
Have you been informed about the impacts of the renovation?							
Have you been informed about the maintenance tasks on the residents' responsibility (e.g. cleaning the ventilators)							
Have you got instructions for carrying out the tasks?							
Do you open windows for ventilation?							
Has the temperature in your apartment been suitable?							
Is the indoor air quality in your apartment good?							

Although all respondents selected that the temperature in their apartments is suitable, one respondent stated that the temperature in the apartment is too warm in the winter and another that the floors in the apartment are cold. The problems with the indoor air quality were described as: draught, stuffy air, humidity, smells from cooking from other apartments, visitors get stuffy nose. More information was hoped for about 1) the ventilation and temperature control, 2) regulations for the residents, and 3) how to carry out the tasks that are on the responsibility of the residents. It was also remarked that the regulations for the residents should probably be updated. Figure 9 shows that a guide book for a resident was regarded as most suitable way of the suggested alternatives to deliver information for the residents about the appliances and maintenance of the apartment.

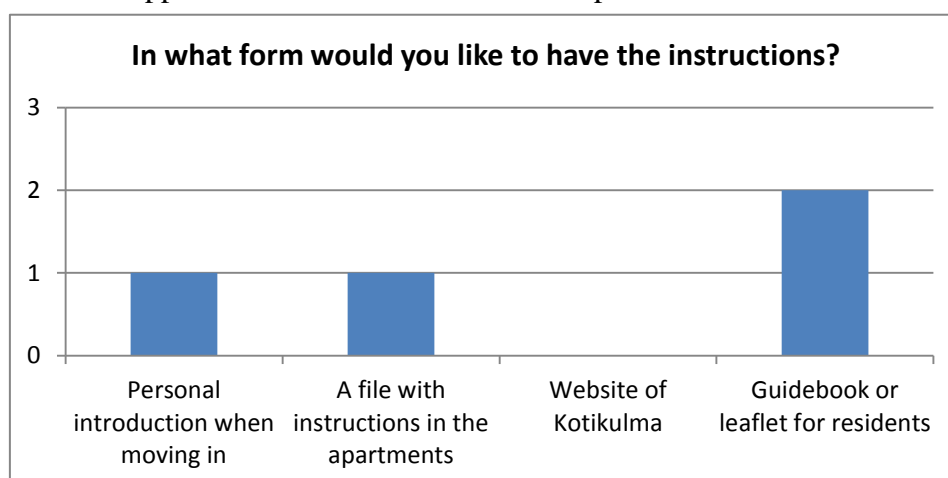


Figure 9: Preferred ways to inform about the maintenance tasks of the apartment

The draft of the guide leaflet on ventilation and temperature control in Innova house was evaluated by the participants. The general rules and instructions on the leaflet were regarded as useful and a good reminder for anybody. Some additions were suggested:

- A clear explanation on why it doesn't help to open the windows when the apartment is too warm.
- The leaflet should be available in several languages (Finnish, English, Russian at least).
- Visual instructions on how to perform the maintenance and cleaning tasks.

The residents hoped for other types of leaflets or guidebooks as well: The responsibilities of the residents and the housing company should be clearly defined and presented to residents. For the tasks that a resident should carry out there should be instructions easily available, and for the matters that require contacting the housing company, up-to-date contact information should be presented.

The discussions in the event were very lively and constructive (Meeting minutes 2015-09-24). The residents had several valuable observations and suggestions for improvements and checks. They also presented ideas on how to support residents' initiative to take good care of the apartments. The participants appreciated the opportunity to discuss the plans concerning the building and its maintenance. It is self-evident that participants in the event represent the residents that are active and interested in taking good care of their apartments, the building and its environment in general.

As a summary of the ULL "Energetic cooperation", based on the activities of the ULL, the following inputs were delivered to Kotikulma for further enhancement of the energy efficiency and interaction with the residents:

- suggestions for technological solutions to decrease consumption of heating electricity
- feedback from the residents of Innova house, including suggestions for maintenance check-ups and needs and wishes of the residents for improving comfortable and sustainable living
- a draft guidebook for the residents of their responsibilities in maintenance of an apartment

The ULL was finalized in November 2015. The further implementation and continuity of the launched activities depends on Kotikulma's priorities and resources. Information about Kotikulma's plans for continuation was not received by the end of the ULL.

For the evaluation and lessons learned from the Peltosaari ULL "Energetic co-operation", see *D 4.1 & 4.2 Evaluation of the Urban Living Labs in Alby and Peltosaari*.

## 5.2 ULL2: Sustainable decisions

### Summary of the Urban Living Lab

The implementation phase of Peltosaari ULL2 "Sustainable decisions" was from April 2014 to September 2015. The ULL was designed to address the challenges in incorporating more clearly the city's climate and energy commitments and targets as well as future regulations into decision making in the municipality. The need for emphasising energy efficiency in future decision making is stressed for example by regulations set by the European Commission Energy Performance of Buildings directive, defining that after 2020 public buildings should be built as nearly zero energy buildings. However, challenging economic situation of the city further complicates making decisions on investments where benefits will be gained in the long-term.

The objective of the ULL was to enhance communication between the city councilmen and the municipal officials and to support decisions on energy efficient and sustainable

investments. Some examples of possibilities to use renewable energy in the city owned buildings were presented. One important part of this ULL was to provide a channel for mutual learning and interaction between the stakeholders so that the preparations and decision making will be efficiently aligned according to future needs and there will be enough information about alternative solutions in an early stage of a planning.

The ULL “Sustainable decisions” was implemented mainly by City of Riihimäki (including the city council) and VTT. Other important stakeholders in the ULL were the external experts and suppliers providing information of the alternative solutions, and representatives from other municipalities and governmental agencies.

For more information on the selection process of the ULL “Sustainable decisions”, see *D 3.1 & 3.2 Selection of Urban Living Labs in Alby and Peltosaari* [SubUrbanLab, 2015] (available at [www.suburbanlab.eu](http://www.suburbanlab.eu)).

### **Establishment and implementation of the ULL**

The detailed planning of activities within ULL “Sustainable decisions” started in March 2014 (Meeting minutes 2014-04-01), after the developed idea of the ULL was approved in the project work meeting (2014-03-03) and in the Steering Committee meeting (2014-03-04). Peltosaari ULL “Sustainable decisions” brought together decision makers and municipality representatives to find out ways for taking into account better and more actively the city’s energy and climate targets in the everyday decision making. Workshops were arranged for activating dialogue and co-development, and ideas for improving practices were gathered.

As an initial study of the potential of new solutions and their presentation, an example analysis for utilising solar energy on the roofs and/or facades of a school building was made already in the autumn 2013 (emails, phone calls). The analysis was done by a PV (Photo Voltaic) expert company called Soleras and (meeting minutes 2013-10-04). It included an implementation plan and an evaluation of the payback time of the PV installation (documentation 2013-10-29).



*Conceptual drawing of the planned solar panels*

The estimated annual energy production of the solar panels was calculated to be between 55-65 MWh, depending on the weather conditions. Excess solar electricity production, which is not utilised in the school (e.g. during summer time) can be used in nearby buildings owned by the housing company Kotikulma or the city of Riihimäki.

Photovoltaic electricity is most economical, when it can be used directly on site. If the annual energy production needs to be higher, it is also possible to further increase the amount of solar panels or use panels with higher efficiency rate and energy production.

In addition, the solar energy pilot could be used for study visits and as inspiration for other buildings in the area. This example analysis demonstrated how benefits and sustainability related investments could be analysed and presented to decision makers in early phases of preparation.

The plan and the analysis were presented to the technical services committee of the city and to the premises department. Implementation of the plans will be considered when more detailed planning of the renovation of the school building begins (anticipated for 2017).

An alternative solution for a residential building in Peltosaari was also prepared within the ULL and presented to decision makers: The building was in bad condition and a decision had to be soon made about either renovating or demolishing it. Investment for a renovation was not conceivable for the city within the required timeframe and thus demolition, and potentially allocating the lot for one new building in future, was planned. An estimation calculation about the costs of demolition compared with selling the building to a private investor was conducted and presented to the technical manager of the city. The estimate was hereafter discussed in the meeting of the technical services committee, and preliminary discussions with a private investor were carried out. Since this alternative seemed promising, negotiations were pursued and they resulted in selling the building to the private investor who was committed to make the necessary repairs for the building immediately.

Two workshops were organized for the decision makers and officials of the City of Riihimäki, one in August 2014 and another in September 2015. The objectives of the events were increased dialogue between the decision makers and officials and development of new practices so that the municipal agreements and decisions would better guide the everyday work of the decision makers. The programs of the workshops were prepared in collaboration between the city officials, researchers and the invited experts (emails, phone calls and meetings in April-August both in 2014 and 2015). Questionnaires were used to gather information before and after the workshops. The discussions and group work in workshops were documented and used in further planning and development.

The first pre-questionnaire collected information on the following energy- and climate goals for 2020 of the city of Riihimäki (distributed by email together with the workshop invitation; 2014-05-22, 2014-06-13, 2014-08-05):

1. goal: Energy-efficiency regulations for buildings 2020
2. goal: Carbon-neutral Riihimäki 2020 – climate strategy
3. goal: Action plan for fulfilling Motiva's energy-efficiency contract 2008-2016
4. goal: Favouring low-emission, energy-efficient and renewable energy-based procurement

The respondents were asked how familiar they are with these goals, how essential the goals are in one's own work and do these goals have effect in the decision making of the city of Riihimäki. The respondents were also asked to give practical examples about how these goals have been taken into account in the decision making of the city of Riihimäki. 33 persons responded to the pre-questionnaire. The results of the pre-questionnaire are presented in Figure 10, Figure 11 and Figure 12.

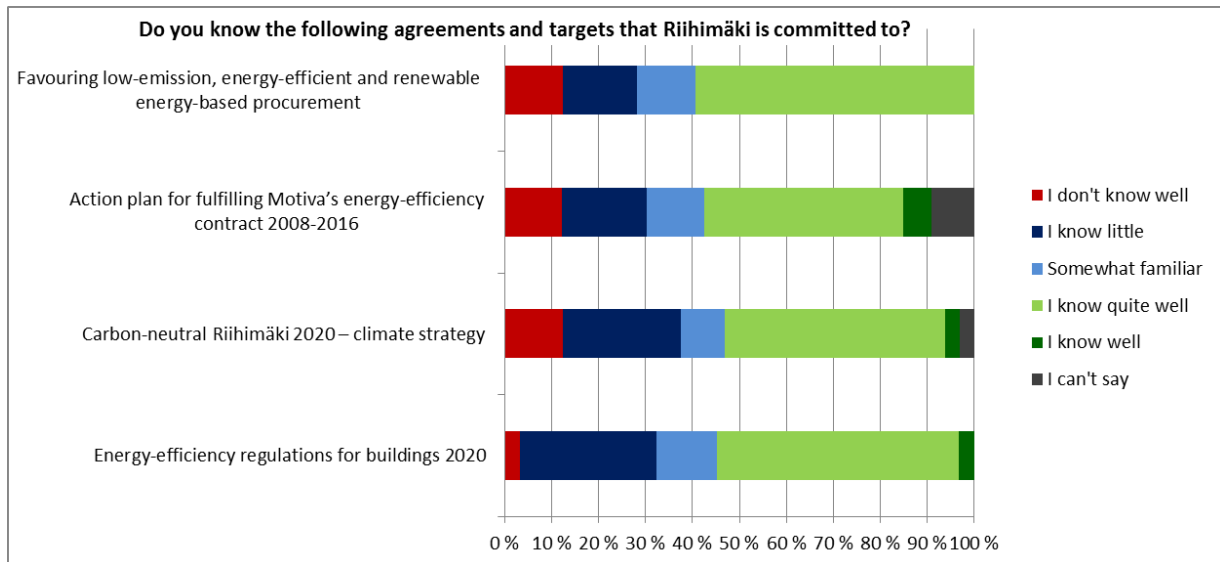


Figure 10: In the pre-questionnaire over the half of the respondents stated that they know the agreements and targets fairly well.

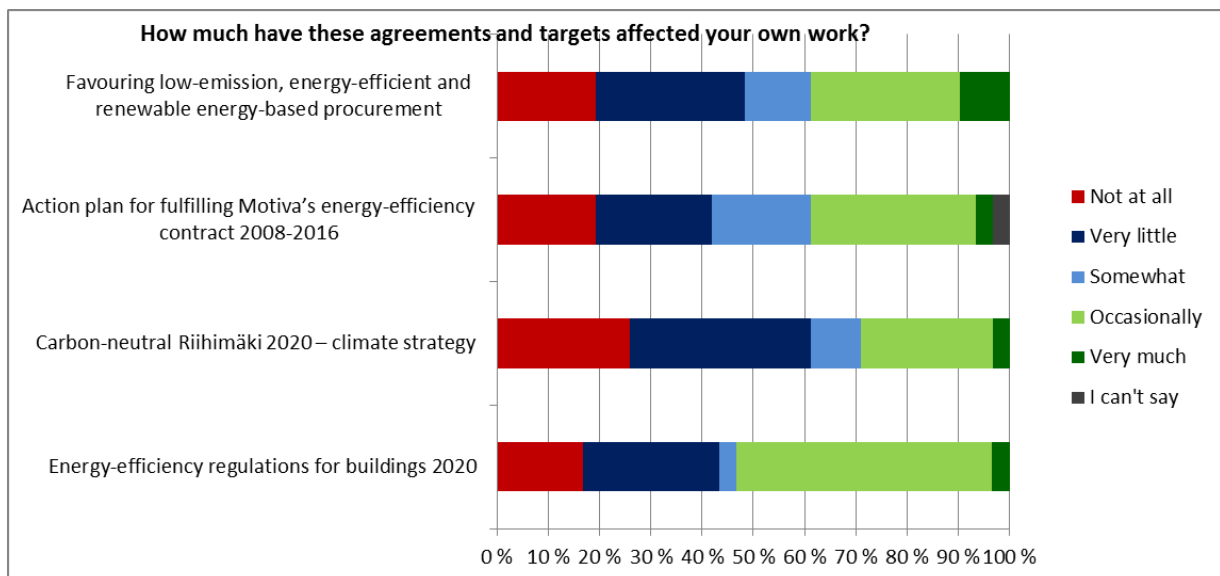


Figure 11: The agreements and targets were not regarded to affect remarkably on the daily work of the respondents.



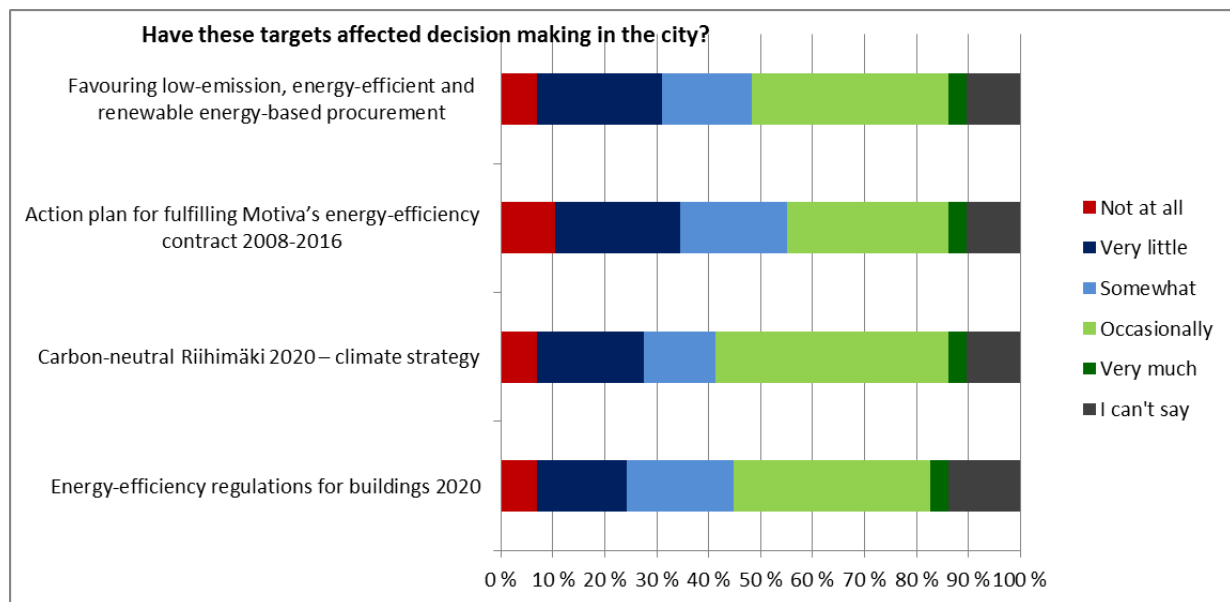


Figure 12: The majority considered that the targets affect decision making in the city to some degree.

The first workshop was organized on 25th of August 2014, with the focus on energy and climate issues. The workshop lasted for four hours on a working day (from 12 to 4 p.m.). 33 persons participated in the workshop (5 councilmen, 22 officials and guests, 6 presenters and organizers). The topics of the workshop were introduced in brief presentations concerning the upcoming regulations for nearly zero-energy building, the role of energy-efficiency in construction projects of City of Riihimäki and the renewal plans of the area around the railway station. Work towards carbon neutral municipalities (“HINKU”) was introduced in a presentation by a project manager from Finnish Environment Institute. After the presentations, the participants formed four groups and the following topics were discussed in the groups:

- What is the role of the city in developing Peltosaari? What would be the benefits and the disadvantages if an office building of the city would be built to Peltosaari?
- What are the challenges related to conforming to the 2020 Energy efficiency regulations, the targets set by the climate strategy 2020 of Riihimäki and the energy efficiency agreements? What kind of information is needed, in what form and in what stage, to support the work towards the goals? Are the goals sufficient?

At the end of the workshop, each group presented a summary of their discussions to other groups: The groups emphasised the necessity for enhancing interaction between the decision makers and the officials and the importance of information and training. Need for a comprehensive analysis of the facilities of the city was also highlighted. The impact of town planning on promoting private investments and development of areas (including decentralisation of the rental apartments in Riihimäki) was stressed in the discussions. Few direct suggestions for solutions enhancing environmental sustainability were made.

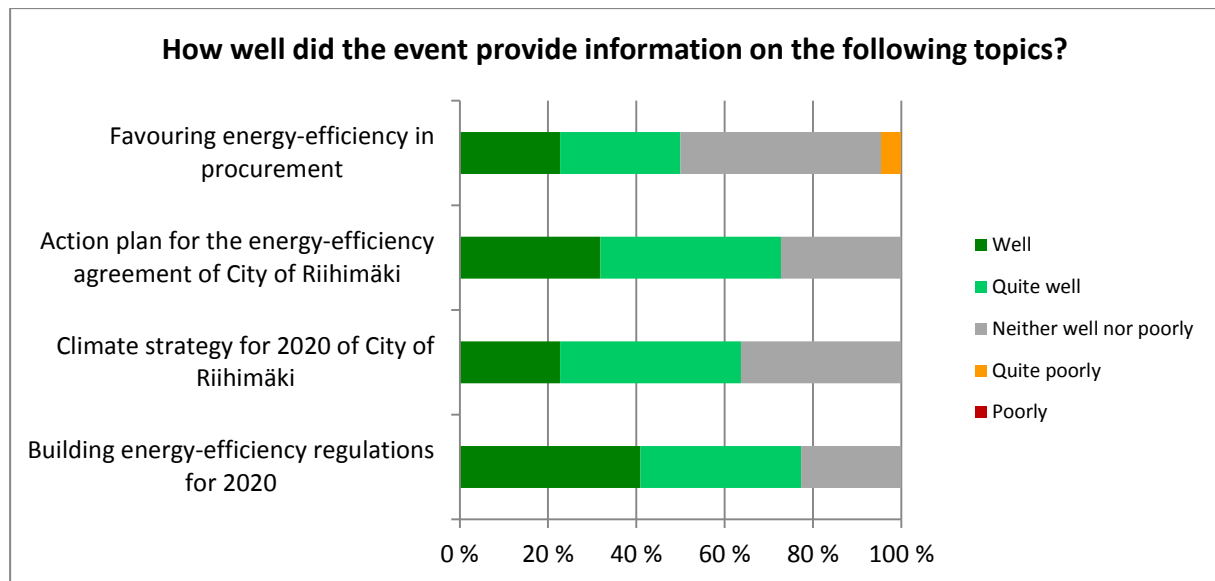
Some concrete suggestions for new practises to be introduced in the city were made:

- More information should be provided to the decision makers in an early stage of planned investments and the overall impacts of decisions should be presented clearly.
- The tenants of the city owned rental apartments should receive an information package or guidance on the maintenance responsibilities when moving in. Tips for saving energy should be included.
- Influencing people's attitudes and routines should start early enough to have an impact: pupils in primary school could be educated and they would disseminate the information further to homes and parents.

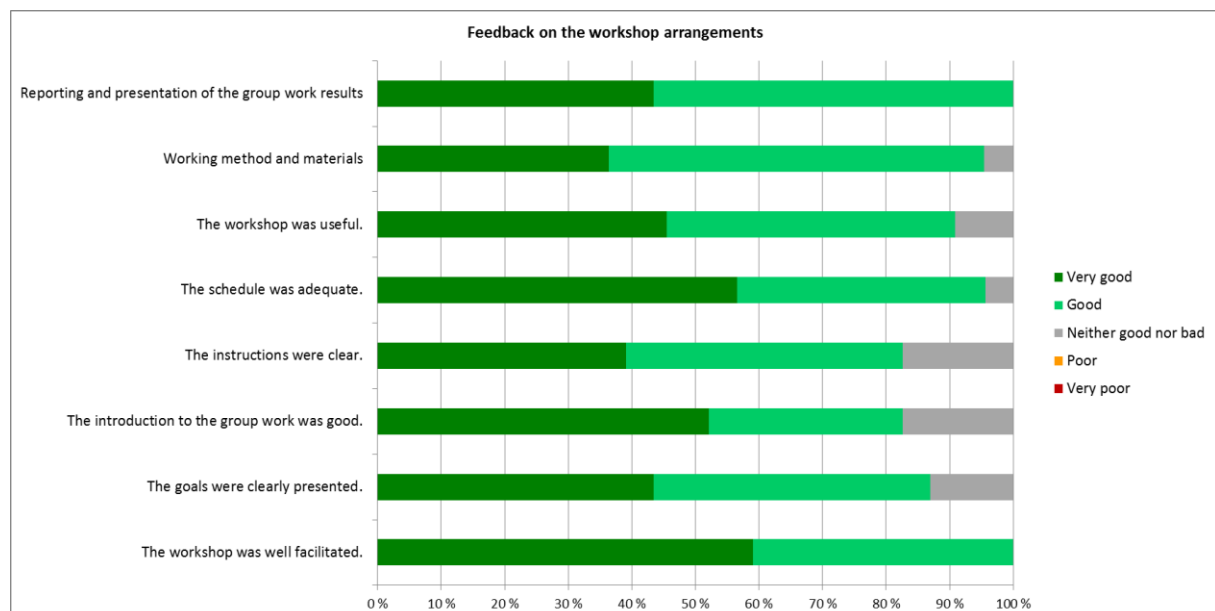


*The workshop for municipal councilmen and officials of Riihimäki on August 24 2014*

Feedback was gathered at the end of the seminar with a questionnaire. 23 responses were received. Figure 13 presents feedback on the presentations. Figure 14 presents feedback on the workshop arrangements.



*Figure 13: Feedback on how informative the introductory presentations in the Energy 2020 workshop were.*



*Figure 14: Feedback on the workshop arrangements.*

A couple of respondents had written open comments in the feedback survey: More councilmen were hoped to participate in future workshops (now only five participated). The event, and especially the group discussions, received positive comments. The information disseminated in the workshop was regarded useful. More similar events were hoped to be arranged.

The overall feedback shows that the participants were generally pleased with the first workshop and especially with the group work. This feedback was utilized in the planning of the second workshop for decision makers and officials. The first workshop was also discussed between the target groups and the main contact person of the organizers in several occasions during the autumn 2014 and winter/spring 2015, and thus informal feedback was received to support further planning of enhancing collaboration. After the first workshop some officials



mentioned that number of cross-department discussions and meetings had increased, and there was more interaction between the departments in preparing new plans and investments.

The second workshop for decision makers and officials was arranged on September 16th 2015 at Riihimäki with 28 participants (15 councilmen, 6 officials and 7 presenters, guests and organizers). The event was scheduled for evening (from 4:30 pm to 6:30) so that more councilmen would be able to participate, after the common working hours. The preparations by the organizing team (City of Riihimäki and VTT) started in May 2015. A draft program was compiled (email 2015-06-15) and preliminary information was sent by email to the target groups: the councilmen and the relevant municipal officials (email 2015-06-17). The invitations to the workshop were sent in August (emails 2015-08-17 and 2015-09-04). The program included introductory presentations about life cycle projects and energy-efficient construction, followed with plenty of time for questions and discussion among the participants and presenters. The guest speakers in the event were director Riku Tolvanen from Inspira Oy (Municipality Financial Advisory Services) and real estate manager Tuomo Vesikko from the municipality of Hollola. They told about experiences with the life cycle projects in construction in Hollola and answered to the questions and comments presented by the participants. The presentations inspired lively discussion in the workshop, and especially the life cycle projects evoked a lot of questions and interest.



*The workshop for municipal councilmen and officials of Riihimäki on September 16, 2015*

Owela-site (<http://suburbanlab.eu/seminaari>) was set up for the workshop so that the invited persons could present already in advance questions or comments there on the themes in the program. There were also some questions for the invited stakeholders about the content of the workshop, about its relevancy on own work and about expectations. Registration to the site was not required to make participation as easy as possible. Notes about the discussions during the workshop were published on the site by the organizing team. The participants were encouraged to continue discussion on the site also after the workshop, and to point colleagues that could not participate in the workshop to visit the site. No responses, comments or questions were received through the site.

Feedback on the workshop was gathered with a brief questionnaire (Figure 15). The participants were asked to fill in the questionnaire at the venue and return the responses before leaving. Ten responses were received.

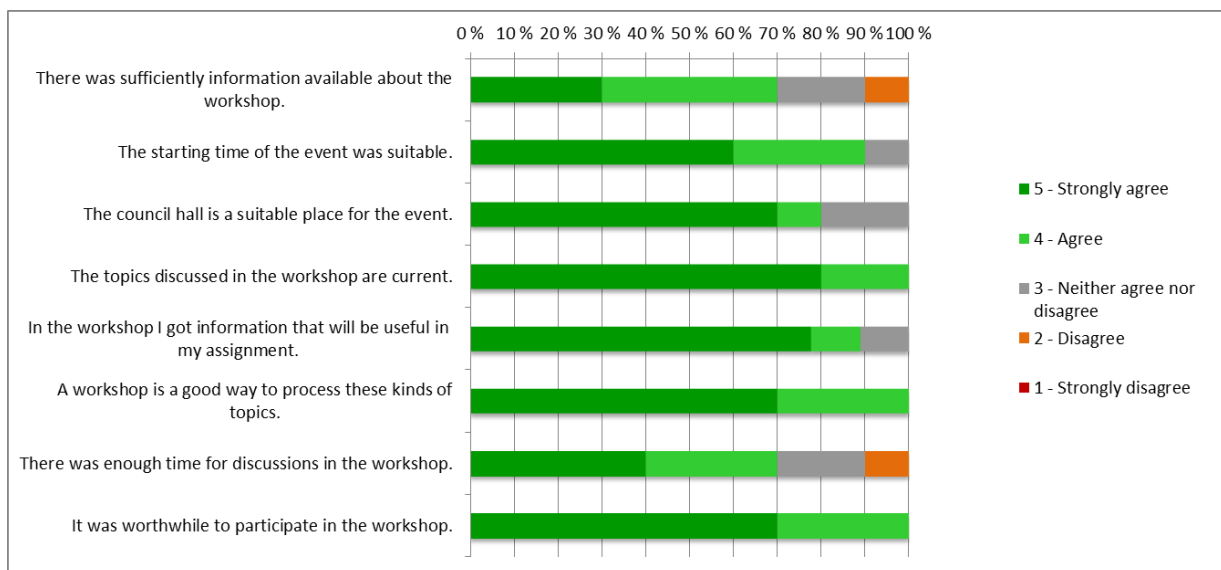


Figure 15: Feedback on the second workshop dealing with lifecycle projects and energy-efficient construction

Six of the respondents mentioned learning of the experiences of the life cycle projects of Hollola as the most valuable part of the workshop in the open questions of the questionnaire. Dissemination of new topical information was also valued. More time for discussions were hoped for in future workshops. Additionally even more promotion of the event in advance for councilmen was suggested. The following suggestions for enhancing flow of information in preparation of plans and decisions of the city were made: workshops and other ways for disseminating information, efficient steering groups for projects, and a shared communication channel. All in all, the feedback on the workshop was again very positive and continuity for the workshops was hoped for.

A final questionnaire was prepared for the whole target group of the workshops; the councilmen and the relevant city officials, regardless of if they participated in the arranged workshops or not. The questionnaire was prepared by the contact persons from the City of Riihimäki and VTT (emails e.g. 2015-11-18, 2015-11-30). The respondents were asked if they had participated in the workshops or been aware of them, and they were asked to assess 11 arguments concerning the impact of city's agreements and goals on the activities in the city and the communication and co-operation between the decision makers and officials. The respondents were also asked to suggest ways to enhance communication and co-operation between the decision makers and officials to support work and decisions towards city's climate and energy targets. A link to the questionnaire was sent by email in December 2015 (emails 2015-12-03 and 2015-12-14). The questionnaire data will be used for evaluation of the ULL.

For the evaluation and lessons learned from the Peltosaari ULL "Sustainable decisions", see *D 4.1 & 4.2 Evaluation of the Urban Living Labs in Alby and Peltosaari*. The evaluation of this ULL includes the impact on decision-making, knowledge of the goals and how to reach them and awareness of sustainable solutions.

### 5.3 ULL3: Together more

#### Summary of the Urban Living Lab

The ULL “Together more” was implemented between March 2014 and November 2015. The initial interviews and general familiarization with the area that were conducted in the beginning of the SubUrbanLab-project revealed that many residents in Peltosaari were frustrated with few visible results from the earlier development projects. Furthermore, they thought that the area was far better than its reputation. The residents value the area for the safe and spacious city planning and closeness to nature. There also exist established free or inexpensive activities and events available for the residents, primarily organized by volunteers. On the other hand, the image of the area was frequently mentioned to suffer from untidiness and social problems. The share of low-income households and unemployed is larger in Peltosaari than in other neighbourhoods in Riihimäki. Despite the good traffic connections and location close to services of the city of Riihimäki, the rents and prices of the apartments in Peltosaari are lower than in other areas with similar location, and thus interest of private investors in the area is low. Therefore it is challenging to finance the necessary renovations and also to attract providers of commercial services to the area.

The objective of the ULL “Together more” was to improve people’s (both those living in Peltosaari and in other parts of Riihimäki or Finland) appreciation of Peltosaari and to create opportunities for meaningful leisure activities and for meeting other people living in the area. The underlying goals were to decrease segregation and to increase communal feeling, to enhance dialogue between the municipality and residents and to support crossing the boundaries between the various identified groupings in the area. Eventually the ULL comprised of three concurrent areas for development: 1) arranging places for activities and meetings (both indoors and outdoors), 2) piloting activities and events and supporting other actors’ undertakings, and 3) increasing communication between the residents, municipalities and organizations.

The ULL “Together more” was implemented in collaboration between City of Riihimäki, VTT, Peltosaari Association, residents, Resident association of Kotikulma Oy, Peltosaari Parliament and other projects related to the area (LiikuTa, Kulttuurivirtys, Caretaker of Vantaa River, Youth first). The key persons of the ULL have in many cases contributed as facilitators, coordinators or integrators, instead of taking a full responsibility of arranging activities. The work has comprised of identifying opportunities, sharing information and contacts, bringing together relevant stakeholders and supporting the launch of activities.

For more information on the selection process of the ULL “Together more”, see *D 3.1 & 3.2 Selection of Urban Living Labs in Alby and Peltosaari* [SubUrbanLab, 2015] (available at [www.suburbanlab.eu](http://www.suburbanlab.eu)).

#### Establishment and implementation of the ULL

The detailed planning of activities within ULL “Together more” started in March 2014 (emails, Meeting minutes 2014-04-01), after the developed idea of the ULL was approved in the project work meeting (2014-03-03) and in the Steering Committee meeting (2014-03-04). The initial interviews that were carried out among the stakeholders of Peltosaari in autumn 2013 provided valuable insight into the planning and implementation of the ULL. The focus

of the ULL could be adjusted based on the discussions with a few residents of Peltosaari and employees of the City of Riihimäki, the project team learnt about the neighbourhood, and some key stakeholders in the area could be identified. It became also apparent that in addition to using social media and digital tools for engaging and collaborating with the residents, use of traditional methods would be necessary. For example the residents of rental apartments rarely contact the housing company by email but instead they prefer to phone or even come to meet the contact persons in the office.

Another essential finding was that many residents felt that they had been involved in development projects already for years and yet there had been little substantial improvements in the area. Unluckily the services in the area had significantly decreased during the last years: a kiosk, a pharmacy and a cash point had been closed as unprofitable. Obviously the city doesn't have influence over the decisions of commercial businesses, but some residents still felt that the development efforts of the city have not resulted in any improvements and referred to termination of commercial services. There were also concerns about the discontinuity deriving from the project work: will the potential activities end as soon as the project ends?

Based on the familiarization with the neighbourhood, people living and working there and the existing activities, premises and communities in Peltosaari, the emphasis on the ULL was put on the aims and activities that bring results in the course of the project and that are apparent also to residents that are not involved in the ULL. As an example, an idea of engaging residents into planning of a potential new village house and activities that would be possible there in the future was discarded because it was evident that a new building could not be constructed and taken into use during the project. Thus, the aims of the ULL were reformulated as the following (see D3.1 & D3.2 [SubUrbanLab, 2015] for more detailed description of the development of the ULL):

- to enhance utilisation of existing spaces in the area as meeting places for residents and as premises for new kinds of activities
- to establish places where communal outdoor activities can be arranged
- to organize inexpensive leisure time activities and municipal activities, and to support sense of community and communication between various groupings
- to improve information and communication about local events and other activities in the area

The communities, projects and organizations that already actively operated in Peltosaari area as the ULL began were:

- Peltosaari Association – a 40-year-old association for residents, operates a recycling centre and a café in Peltosaari run by volunteers (open every Tuesday and Thursday 15-18), organizes trips and events for its members and all residents
- Resident committee of Kotikulma – a committee of residents of the rental apartments in Peltosaari, possessing a club room Tellustupa, arranging events and happenings for the residents and being the cooperation body between the housing company and the residents
- Peltosaari Parliament – a collaboration network between the residents and the representatives of the city (established in an earlier project), meetings where future



activities are planned and information is shared about the plans concerning the area; volunteer residents have taken responsibilities e.g. for arranging sports events, gardening and cleaning events.

- Peltosaari project (an umbrella of all development projects in Peltosaari) and Youth first project, having an office in Peltosaari at former kiosk “Ärrä”. Receptions of social services have also been arranged there.
- LiiKuTa, a project by the City of Riihimäki linking sports, culture and arts and arranging events and activities for the citizens.

Numerous events for residents have been regularly arranged already for several years by the groupings in the area, e.g. Peltosaari Olympics for children, Cleaning day, Christmas porridge and Summer markets. Discussions about collaboration between the above mentioned groupings and the ULL were initiated (discussions, email phone calls during spring 2014). An urban



*Seedlings grown by the school children, ready to be planted on the gardening patch in May 2014*

gardening activity for school children was launched in collaboration with the ULL, the LiiKuTa-project, local school and a volunteer gardening contact person from Peltosaari Parliament (2014-04-02). The seedlings were initially grown as a school project. At the end of May 2014, in combination with the opening of the market season in Peltosaari, a planting event was arranged by the ULL, the LiiKuTa project coordinator and the gardening contact person. School children and their parents were invited to plant the seedlings on a gardening patch in the area and to take care of the plants during the summer. The aim was to provide an opportunity for the children to learn about gardening, to promote for the families the possibility to grow own vegetables and to work together for a more beautiful environment. The personnel of the city took turns during the summer months to water the plants. The interest of the children and the families faded during the summer and the patch was also damaged by outsiders, and thus little crop was gained to be shared among the participants. Nevertheless, harvesting of the patch was celebrated in context of end of summer market season in August 2014 (2014-08-27). Experiences and learnings of the urban gardening activities were discussed among the Swedish and Finnish project partners, including the coordinators of LiiKuTa and Boodla, in the project meeting on August 19th, 2014.

In parallel with the opening of the market season and the planting event on May 24th, 2014 a questionnaire was run for the residents in the area. A stand was set up in the middle of Peltosaari and printed questionnaires were handed for the people on the move in the pedestrian zone. The goal was to gather data on the views of the residents about the area and their wishes for improvements to gain inputs from the residents for the next phases of the ULL. The responses were collected during the day. The same questionnaire was also available on the website of the Peltosaari project. 87 sufficiently filled in questionnaires were received



(74 gathered in the event, 13 through the website). The discussions with the residents at the stand and the direct feedback gained during the event provided also valuable background information for the researchers.

65% of the questionnaire respondents were female. 24% of the respondent represented age category 65 years or older, 8% 18-24 years, and the sizes of other categories (25-34, 35-44 and 55- 65 years) ranged between 14 and 17%. About the half of the respondents lived in rental apartments and half in owner-occupied apartments. 58% of the respondents agreed with the statement that Peltosaari is a good place to live in. 54% of the respondents would recommend moving to Peltosaari to their friends currently living elsewhere. Peltosaari was most frequently described by the respondents as relaxed and close to nature. The residents especially value Peltosaari for the location with good traffic connections and close to services, good opportunities for sports and affordable dwelling costs. Improvements were especially hoped for services in the area, communication about the events and development plans concerning the area and for tidiness of the neighbourhood. Contradictory opinions were presented about placing several benches in the area: many hoped to have an opportunity to sit in the parks and to have a rest while running errands but almost equally many thought that there should not be benches in the area since the drunks will gather around them. According to the questionnaire the residents are best reached through the local newspaper Aamuposti and announcements and leaflets on the notice boards in the area (see Figure 16). In the age group from 18 to 44 years the most important information channels were the website of the City of Riihimäki and notice boards whereas the local newspaper was regarded as less significant.

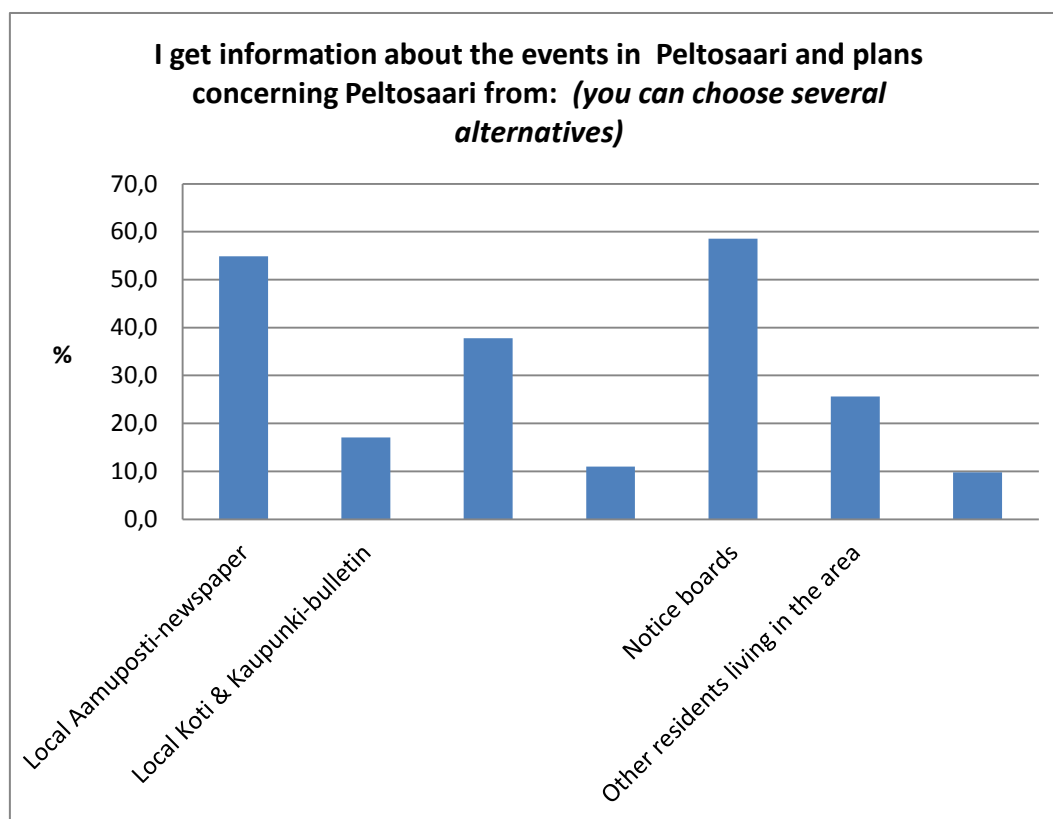


Figure 16: The residents get information about the events and plans concerning Peltosaari mostly through the local newspaper and notice boards, based on the questionnaire in 2014.

The results of the questionnaire and the experiences gained while running it strengthened the view that also other means than social media will need to be focused on for engaging the residents in the ULL, preferably face-to-face methods. Based on the views of the respondents, improving tidiness of the area was selected as an additional subject for development in the ULL.

A resident discussion event was organized in November 19th, 2014 at Peltosaari school. Invitations to the event were set out on the notice boards all around Peltosaari. The aim of the event was to gather together residents and people representing different organizations operating in the area to discuss how the tidiness of the area could be improved and to share information on what kinds of projects and plans concerning the neighbourhood are underway. In the beginning of the event a brief presentation of the topical issues of the Peltosaari project and a summary of the results of the resident questionnaire were given. A development plan on the Peltosaari green areas and a plan to build a fishing place to the pond in the park as a part of a larger restoration project of Vantaa river were also presented. The participants were encouraged to ask questions and present comments throughout the event. The conversation became vivid during the panel discussion with Ilari Seitsonen (representing Peltosaari project, City of Riihimäki), Tony Latva (an active blogger and resident), Veera Valkama (representing Riihimäki green area program) and Kim Junell (representative of Kotikulma housing company). The discussion was facilitated by Riikka Holopainen from VTT. The panel discussion and the numerous comments, questions and suggestions from the participants' concerned tidiness of the area, how to increase attractiveness of the area and what kinds of measures could be introduced to prevent cluttering. About 70 residents participated in the event. A meeting minute with a list of the suggestions and development needs presented by the participants was compiled (meeting minutes 2014-11-19). A blog post summarizing the topics discussed in the event was published on the Peltosaari website after the event (<http://www.riihimaki.fi/wp-content/uploads/sites/3/2015/01/Ensi-lunta-katsellessa...pdf>).



*The resident event for discussing improving tidiness and attractiveness of Peltosaari in November 2014*

In the beginning of the ULL the city of Riihimäki rented the old kiosk space “Ärrä” and it was used as a meeting room and a project office but also occasionally for the activities arranged for the residents. In order to establish a more suitable residents' space in the area, so called Living room, potentially available pieces of real estate were sought for rent or acquisition. Negotiations with the owners of real estate in central Peltosaari were carried out and offers

were made but rejected. Unexpectedly the kiosk space was sold to a third party and the rental agreement of the city ended in December 2014. Thus, instead of obtaining larger premises in Peltosaari the city ended up with not even having a meeting space in 2015. Collaboration with the existing communities had kicked off well and thus there had already been joint activities in the Recycling Centre of Peltosaari Association and at Tellustupa of Kotikulma residents' association during 2014. For example, weekly multicultural meetings, "Olohuone Riihimäki", were launched at Recycling Centre in November 2014. The "Olohuone Riihimäki"-activity is a joint effort between the Peltosaari project, LiiKuTa-project and the project to Integrate Immigrants through Sport. For enhancing the communication and collaboration between the residents and the city officials it was nevertheless regarded essential to have a local meeting place operated by the city for meetings, project work and activities in Peltosaari area. A rental agreement was made of an old grill kiosk beside the Recycling Centre in December 2014. Some activities were started there already in January 2015 (like the multicultural cafés). The space was renovated to better serve as a meeting place and a communal living room for the residents. There is space for 10-15 people in the meeting room and there's also a small kitchen. The opening ceremony of the "Olohuone" was on March 20th, 2015. Since its opening, the activities arranged in "Olohuone" include e.g. counselling for immigrants once a week, a theatre club for the children and young during the summer, a cooking event, multicultural café once a week, workshops and it also serves as an office for the employees of the city a couple of times a week. The residents can also reserve the space for their use in the evenings.



*The residents' space "Olohuone" in Peltosaari*

In collaboration with another project of the City of Riihimäki, Kulttuuriviritys, the ULL organized a hire of a pop-up space in Peltosaari ("Taideärrä") for October-December 2015. The roomy space enabled arranging numerous cultural activities for the residents during the autumn by Kulttuuriviritys- and other projects (see Table 4 for some examples).

One of the goals in the ULL was to establish also pleasant places for outdoor activities in the area. Collaboration with a project focusing on increasing recreational use of Vantaa river ("River janitor") resulted in building a fishing place to Bad Segerberg pond in Peltosaari in May 2015. A fishing event was arranged at the fishing place on October 10th, 2015 together with a local fishing association. Approximately 25 persons participated in the event. In future the school will also bring pupils to the place to learn to use fishing equipment and to learn to handle and recognize fish.





*Newly built fishing place at the pond in Peltosaari*

A midsummer festival was arranged in June 2015 as a joint effort between the ULL and Peltosaari Association. The aim was to experiment a new kind of event in Peltosaari. Traditionally in Finland people travel to summer cottages at countryside to spend the Midsummer holiday. However, there are a lot of people who don't have the possibility or prefer not to go to countryside. There are very little activities in the cities during Midsummer and thus the weekend may be lonely for many people. Invitations to the festival at Bad Segerberg pond were distributed through notice boards and social media. In the event an artist played traditional music, sausages, pancakes and coffee were available and a bonfire was set on fire at the pond. The event was a success: Approximately 300 residents participated in the event and the feedback was very positive. The event clearly attracted also families with small children and residents who don't regularly attend the Peltosaari events. The reason for that may be that the event was easy to stop by without preparations or registration in advance, the participants didn't need to commit to anything nor be active during the event.



*Midsummer festival at Bad Segerberg pond in Peltosaari (2015)*

A similar event was arranged on August 29th 2015, in the evening of the cleaning day: End of summer season party at Bad Segerberg pond (called "Venetsialaiset" in Finnish). Music and other program were performed. Catering in this event was subject to a small fee. Candles were

lit and put to float in the water at dusk. About 100 residents participated in the event. Also this event received a lot of positive feedback and was hoped to become a tradition in Peltosaari.

Social media channels, Facebook, Twitter and Instagram accounts, were established for Peltosaari for enhancing communication about the events in Peltosaari and the plans concerning the area, and to provide an interactive channel for the residents to participate in discussions. The new channels are also hoped to reach better the young people living in the area since that has been a challenge. A trainee worked in the project for a while and he registered the accounts and initiated the communication in January-February 2015. The Facebook and Instagram sites are public so that anyone can see the postings there. The URLs of the sites are:

- [www.facebook.com/peltosaari](http://www.facebook.com/peltosaari)
- <https://twitter.com/peltosaari>
- <http://instagram.com/peltosaari>



*Peltosaari in social media*

There have been about 100 status updates between January and November 2015 on the Facebook site and it has a couple of hundred followers. Peltosaari Twitter-account has tweeted 21 times during Feb-Nov 2015 and it has 46 followers (2015-12-08). Peltosaari Instagram-account has 10 posts and 11 followers. All kinds of events, regardless of the organizer, have been promoted on the sites. The Facebook site also has provided information about sustainability and energy efficiency and about potential development plans concerning Peltosaari.

The activities described above are the ones where the ULL has been in central role, as the main initiator or an essential coordinator. In addition to those, there have been numerous other activities in Peltosaari during the years 2014-2015 (see Table 4 for examples). The ULL “Together more” has been involved in many of those through promoting Peltosaari, associations and available premises there for the activities, through the contacts and discussions with people making decisions and by offering practical help for the arrangements. This has probably been even more important part of the ULL because the activities that are not dependent of the project can continue even after the project has ended. This work has also decreased the boundaries between the various stakeholders operating in the area and highlighted the significance of collaboration when available resources are scarce.



Table 4. Open activities and events in Peltosaari during the ULL

Event or activity	Frequency	Main organizer
Chair gymnastics for the seniors	once a week since Sep 201	Volunteers from Peltosaari Association
Brain gymnastics for the seniors	once a month since Oct 2014	City of Riihimäki (services for home help and elderly) and trained volunteers
Neighbourhood walks for seniors	once a week (from Oct 2014 to May 2015)	Volunteers from Peltosaari Association
Pea soup (Shrovetide)	once a year	Peltosaari Association
Peltosaari Olympics for children	once a year	Sports coordinator of Peltosaari Parliament
Theatre club	twice a week during the summer 2015	Kulttuurivirtys –project (City of Riihimäki)
Peltosaari Association's 40 <sup>th</sup> anniversary	once (31.5.2015)	Peltosaari Association
Opening of Christmas street	once a year	In 2015: Kulttuurivirtys-project, Peltosaari Association and ULL
Event around Riihimäki station	once a year	City of Riihimäki together with several associations and organizations
Christmas porridge	once a year	Peltosaari Association (& ULL)
Multicultural café	once a week	Project of Hyria (an institution offering vocational education and training in Hyvinkää and Riihimäki area)
Street painting (30.5.2015), sewing club and other occasional workshops	during summer and autumn 2015	SuoMun Kiertävä muotoilukoulu Hämeessä (association for handicraft and design workshops)
Summer markets	weekly during the summer	Peltosaari Association and Residents' association of Kotikulma
Story day for children	once (18.10.2015)	Kulttuurivirtys-project
Cleaning day	twice a year	Peltosaari project
Restaurant day	1-3 times a year	21.11.2015: ULL, Peltosaari Association and Kulttuurivirtys-project
Vietnamese cooking & dinner	once (22.11.2015)	Kulttuurivirtys-project

Peltosaari has been frequently mentioned in the local media during the ULL (20-30 news articles each year). There have been positive stories about the organized events and activities in the local newspaper, and thus also people living outside Peltosaari have become aware of them.

As a summary, the ULL focused on three areas for development to enhance wellbeing and sense of community among the residents and to increase attractiveness of the area:

- 1) Arranging places for activities and meetings (both indoors and outdoors)
  - Living room was established
  - Fishing place was built and the area around the park and pond has been tidied up
- 2) Piloting activities and events and supporting other actors' undertakings
  - Gardening project with the children
  - Midsummer festival and end of summer season
  - Support to activities arranged by other projects and organizations
- 3) Increasing communication between the residents, municipality and organizations
  - Social media in communication about the events (Facebook, Twitter and Instagram)
  - Collaborative activities between different actors
  - Resident events and questionnaires

For the evaluation and lessons learned from the Peltosaari ULL "Together more", see *D 4.1. & 4.2 Evaluation of the Urban Living Labs in Alby and Peltosaari*.

## 6 SUMMARY AND DISCUSSION

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The six Urban Living Labs implemented within the SubUrbanLab project are very different from each other focusing on different actions, using different methods and set in different contexts with different stakeholders. Hence, six different establishment and implementation processes have been described in this report.

However, there are similar features between the six ULLs. For example, the descriptions of the establishment and implementation processes clearly highlight how each ULL have been shaped and changed along the process as a consequence of the context where it is set, unexpected events and the impact from different stakeholders. The processes have not been linear but taken unexpected turns as researchers, decision-makers and public organizations, residents and companies have been taking part in co-creation of each ULL. Other aspects and challenges such as delayed access to technology, differences in priorities, terminology and procedures among the key stakeholders and difficulties in long-term commitment from residents have also been important factors in shaping the process of the ULLs. To integrate different stakeholders as active partners in the whole process of modernization and social uplifting actions and its development in a real life context are, however, some of the main features in the definition of an Urban Living Lab.

A full evaluation of all the ULLs can be found in the evaluation report - *D 4.1 & 4.2 Evaluation of the Urban Living Labs in Alby and Peltosaari* – where the ULLs' contribution to sustainability and the effectiveness of ULL as an approach is evaluated. The report also puts forward the main lessons learned from all the implemented ULLs highlighting differences and similarities between the ULLs further. More detailed information about the different methods used in the ULLs and an assessment of their suitability can be found in the report *D. 2.2 Assessment of the suitability of different Urban Living Labs methods for modernisation and social upgrading actions*.

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